Request for Proposals for the Rehabilitation, Reuse and Maintenance of:

dcr
Massachusetts

Proposals Due: Wednesday, May 15th, 2024, by 3pm

Showings by appointment. Please contact hcp.requests@mass.gov

The **Department of Conservation and Recreation** is steward of one of the largest state parks systems in the country. Its over 450,000 acres is made up of forests, parks, greenways, historic sites and landscapes, seashores, lakes, ponds, reservoirs and watersheds. DCR's mission statement is:

> ***To protect, promote and enhance our common wealth of natural, cultural and recreational resources for the well-being of all***

Contact Us:
Department of Conservation and Recreation
State Transportation Building
10 Park Plaza, Suite 6620
Boston, MA 02116

DCR Main Phone: 617-626-1250
e-mail: mass.parks@state.ma.us

Commonwealth of Massachusetts
Maura T. Healey, *Governor*

Executive Office of Energy & Environmental Affairs
Rebecca L. Tepper, *Secretary*

Department of Conservation & Recreation
Brian Arrigo, *Commissioner*

Priscilla Geigis, *Deputy Commissioner for Conservation and Resource Stewardship*
Susan Hamilton, *Deputy Commissioner for Recreation and Operations*

Office of Cultural Resources
Wendy Pearl, *Director*

Historic Curatorship Program
Ethan Parsons, *Program Manager*

Contents

PART I – OVERVIEW: FORGING A UNIQUE PARTNERSHIP

The Commonwealth of Massachusetts, acting by and through the Department of Conservation and Recreation (DCR), is pleased to invite Proposals for a unique opportunity:

The rehabilitation, reuse and maintenance of the historic former Superintendent's House at Beartown State Forest in Monterey, in return for a long-term lease

A. Historic Curatorship Program Basics

Curator Larry Seaboyer restores the custom pressed tin ceilings at the Ft. Revere Officers' Quarters in Hull

Within the Commonwealth's over 450,000-acre park system are several unused, historically significant buildings. Some of these properties have declined due to neglect, exposure to natural elements, and vandalism. The Historic Curatorship Program was established to preserve these vulnerable landmarks. Through the program, DCR partners with a Curator who agrees to rehabilitate, manage, and maintain a historic property in return for a long-term lease. As a result, the Commonwealth secures the long-term preservation of a threatened historic structure and the Curator exchanges hard work and unique skills for a long-term lease in a one-of-a-kind location.

Curators are selected through an open and competitive process, and a proposed reuse must be compatible with the historic and natural character of the surrounding parkland. Proposals are evaluated according to the experience of the applicant, the quality of the reuse plan, proof of sufficient resources to undertake the project, and level of public benefit beyond providing required biannual public access. Lease terms generally range from 20 to 30 years and are determined based on the amount of work required and the Fair Market Rent.

Former Superintendent's House, Wachusett Mountain State Reservation, Before and After

B. Purpose of Request for Proposals (RFP)

The purpose of this RFP is to identify and select a Curator who:

- Is committed to the rehabilitation, management, and maintenance of the historic Superintendent's House
- Understands and accepts the unique challenge of leasing a property located in a state park
- Possesses the required skills and resources to ensure the long-term preservation of the property
- Has a reuse that is compatible and complimentary to the building, the park and its visitors

The State Legislature enacted enabling legislation for the Historic Curatorship leasing program in 1994 (§44, Ch.85, Acts of 1994 as amended, see Appendix G). This legislation provides for an open, competitive selection process for Curators, consistent with established procedures of the Massachusetts Division of Capital Asset Management and Maintenance (DCAMM). This Request for Proposals conforms to these requirements.

For any questions on this RFP, contact the Historic Curatorship Program:

Ethan Parsons, Program Manager
State Transportation Building
10 Park Plaza, Suite 6620
Boston, MA 02116
HCP.Requests@mass.gov
857-262-4015
mass.gov/dcr/curatorship

PART II - PROPERTY INFORMATION

A. Site Context

The former Beartown Superintendent's House is in Beartown State Forest in the southern Berkshire town of Monterey. Beartown welcomes over 100,000 visitors annually for activities such as hiking (including the Appalachian Trail), camping, fishing, and cross-country skiing. The house is located at the park's southern entrance, adjacent to park headquarters. The house is minutes from multiple state parks, ski areas, Great Barrington, Stockbridge and other vibrant and creative towns and villages as well as world class attractions such as Jacob's Pillow Dance Center, Tanglewood Center for the Performing Arts, and Naumkeag Estate.

Welcome to DCR's Beartown State Forest

Home to the pristine Benedict Pond and a section of the Appalachian Trail, Beartown offers 12,000 acres of park land and is primarily used for fresh water swimming, camping and hiking.

Beartown is part of the Massachusetts Department of Conservation and Recreation (DCR), an agency of the Executive Office of Energy and Environmental Affairs.

DCR oversees 450,000 acres of parks, forests, beaches, bike trails, watersheds and dams. Its mission is to protect, promote, and enhance the state's natural, cultural, and recreational resources. To learn about DCR and to discover more parks and recreational opportunities within the Massachusetts state parks, visit www.mass.gov/dcr.

TRAIL USE GUIDELINES

- Stay on designated trails and roads
- Observe all posted rules and regulations.
- Camping allowed only at designated campsites or leantos.
- **Motorized vehicle use limited:** Inquire at Forest Headquarters
- Be respectful of other trail users:

Hikers: Allow bicyclists and equestrians to pass.
Bicyclists: Control your bike-do not skid. Avoid startling horses and hikers-announce your presence.
Hikers: Allow bicyclists and equestrians to pass.

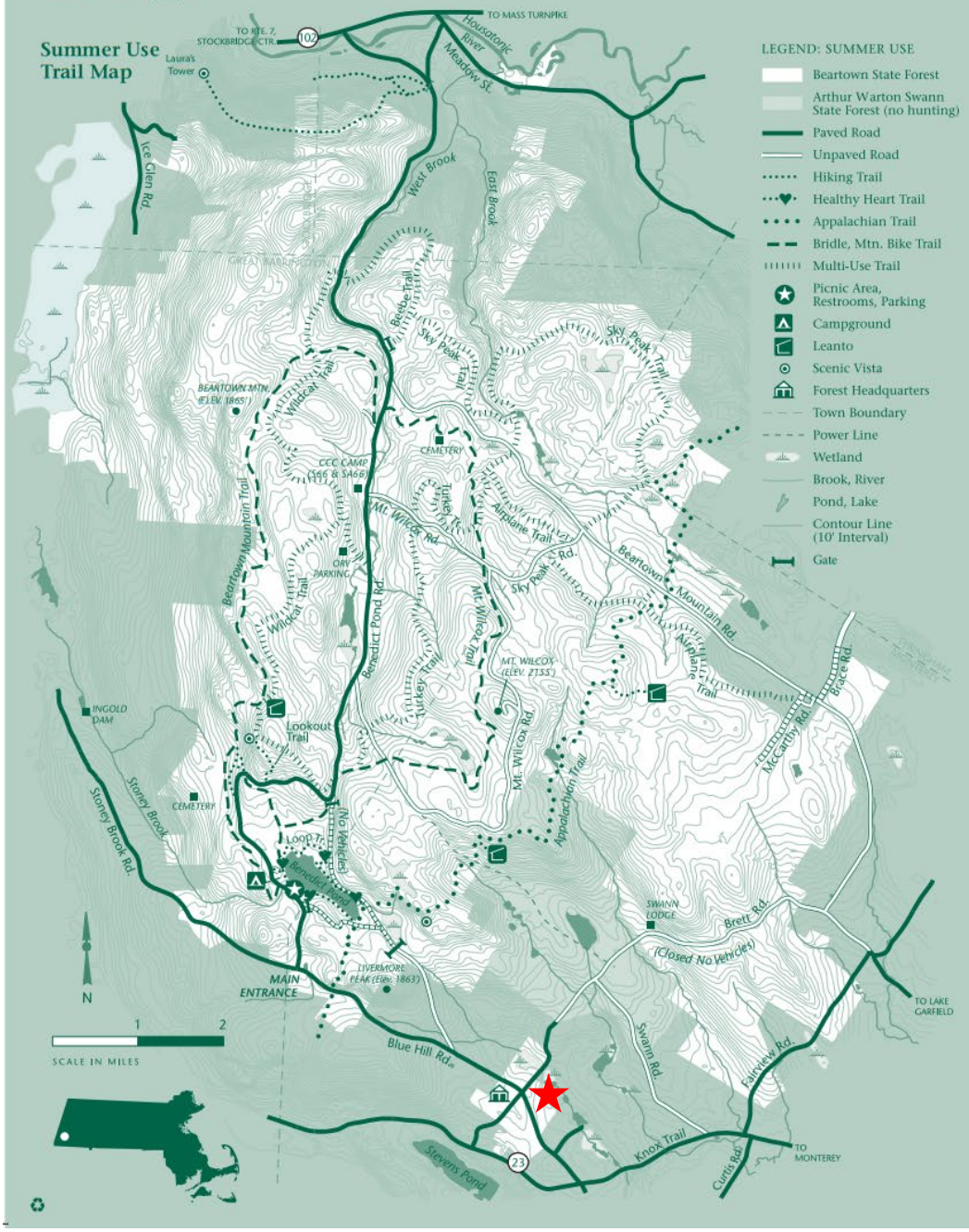
- Be aware of hunting seasons and wear blaze orange when appropriate.
- Off Road Vehicle (ORV/OHV/ATV) Riding Season: May 1st-last Sunday in November, weather permitting.
- NO ORV/OHV/ATV operation allowed in campground.

Designated by a heart symbol, Healthy Heart Trails are pathways or trails used for hiking or walking that are easy to moderate in activity level, and intended for routine use to help build a healthy heart.

REI co-op www.rei.com

ADVENTURE PROJECTS www.adventureprojects.net

Summer Use Trail Map



B. Description

The original section of the house, a post-and-beam structure built in 1799, includes a full basement with a concrete floor and mortared fieldstone walls. A one-story rear wing was added when the Civilian Conservation Corps (CCC) converted the former farmhouse into a forest headquarters in the 1930s for CCC Forest Superintendent John Lambert. This post-and-beam structure consists of one large room and a large rustic fieldstone fireplace at the east gable end. The interior of the house is characterized by exposed timbers and purlins and plank wall paneling on the second floor. The house features Craftsman-style built-ins such as map files, a hutch and a linen closet, all dating from the 1930s. The house interior evokes its past both as a rural early American farmhouse and as a CCC-designed forest headquarters.

Square Footage

2,300 square feet (additional 800 s.f. in an unfinished basement), including 4 bedrooms and 2 bathrooms.

Sanitary system

Title V compliant septic system that has been recently repaired to Department of Environmental Protection approved standards and can accept 400 gallons of wastewater per day.

Plumbing System

Entire plumbing system will likely need to be replaced. A new well will be required to serve the building (See Section F).

Electric System

Will require a completely new service and system.

Heating System

The current system is non-functioning. A non-fossil fuel system meeting the MSB Energy Stretch Code, such as, electric air or ground source heat pump is strongly encouraged.

Structure

The structural integrity of the building will need some additional work. DCR repaired much of the sill and stabilized the basement walls and floor. Additional structural reinforcement will likely be required on the second story. A new roof was installed in 2018. The building is not currently insulated.

Interior Elements

The house retains many of its historic interior finishes, including some flooring, wood paneling and built-in furniture. A substantial amount of interior wall and ceiling covering has been removed and it is assumed that the walls and ceilings will be plastered or drywalled after systems installation and structural work.

Exterior elements

Clapboard siding has recently been scraped and painted and is in good condition. The window frames are in substandard condition and will need to be repaired. The sashes are restored but will need to be reinstalled into repaired frames.

C. Photographs

D. Historic Significance

The Beartown State Forest Superintendent's House occupies a landscape significant for its living record of nearly 250 years of agricultural and forest history in Monterey.

The area along Blue Hill Road, now known as Beartown State Forest, was settled soon after the Revolutionary War and divided into farms for raising cattle and sheep. Lumber was another source of income for these farms, which existed until the beginning of the 20th century. Stone walls still located on the property outline the field configuration for grazing and cultivation as it was two hundred years ago.

By the beginning of the twentieth century, the abundant forest of Beartown had been almost completely cut. Members of the Civilian Conservation Corps, formed in the 1930s, found the land almost entirely depleted of both woodland and cleared farmland. In an effort to reforest the area, the CCC planted spruce and red pine; these trees are still found in the south field along the stone walls, which date from the 1800s.

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hutch and a linen closet, all dating from the 1930s. The house interior evokes its past both as a rural early American farmhouse and as a CCC-designed forest headquarters.

E. Property Access & Adjacent Land Use

The site is accessible from Brett Road and is surrounded by protected State Forest property. While the house is directly adjacent to the park headquarters, it is not directly adjacent to any park trail head. The core of the Beartown State Forest recreational area, around Benedict Pond, and the Appalachian Trail is approximately 1.5 miles away.

F. Development Considerations

- The property will be offered in an as-is condition, apart from assistance towards water service, described below. A potential Curator will be required to provide all improvements needed to receive a Certificate of Occupancy while preserving significant exterior and interior features.
- The well serving the house requires repairs and upgrades. DCR will commit to aiding in the establishment of a potable and compliant private water source not to exceed $40,000. The scope and cost will be dependent on the proposed reuse (and applicable regulations) and the condition of the existing well. Any agreed upon support will be determined before a lease is executed. All work will be performed by DCR via its contractors.
- DCR is accepting proposals for uses including but not limited to: short-term guesthouses, bed and breakfasts, non-profit office and/or program space, small-scale retail or similar. Reuses are limited by the floor space of the building, the septic system and well capacity. Keep in mind any public use will be required to comply with the Americans with Disabilities Act and any other state regulations pertinent to the Building Code chosen for the reuse.
- While the space directly around the house would be available to the Curator, any use or design of the space will be required to be compatible with the historic landscape and the site's place at the entrance to the park. While the construction of a compatible small storage building would be allowed, the design, scale, massing, and location of any outbuilding would be subject to approval by DCR, the Massachusetts Historical Commission, the State Building Inspector, and any other pertinent inspectional authority. No substantial new construction will be allowed.
- The house is located directly across from the park's headquarters, which contains staff offices, as well as storage for vehicles and park maintenance equipment. Curators can expect the headquarters to be an active maintenance location and any reuse must consider that the site can be busy and noisy at times due to normal park operations.
- Any rehabilitation plan must consider Massachusetts' Executive Order No. 594: LEADING BY EXAMPLE: DECARBONIZING AND MINIMIZING ENVIRONMENTAL IMPACTS OF STATE GOVERNMENT and specifically Section 7 Guidelines for Existing Buildings. Additional consideration will be given to proposals that incorporate environmentally sustainable product and technology, especially regarding heating and cooling systems.

PART III – CURATORSHIP REQUIREMENTS

A. Reuse Conditions

The Commonwealth considers the primary purpose of leasing historic properties through the Historic Curatorship Program to be to facilitate their long-term preservation. Historic properties may be leased only if the following reuse conditions are met:

1. The proposed use(s) are compatible with the mission of the Department of Conservation and Recreation;

2. The proposed use(s) are compatible with the public's enjoyment of the surrounding park;

3. The proposed improvements and use of the property are compatible with the quality and significance of the resource;

4. The proposal for reuse includes public access to the property at least twice annually.

Preferred re-uses will provide a public benefit component to the park, park visitors, and/or the Berkshire community. Some examples of preferred uses include short-term guesthouse or bed and breakfast (less than 30 days), small scale outdoors-related retail or equipment rental, or office and/or programming space for a compatible non-profit.

B. Responsibilities

The Commonwealth intends that, under the lease, the Curator, and all heirs, successors and assigns, shall have sole responsibility for:

1. Rehabilitating and maintaining the property as a significant historic resource in conformance with the preservation and construction standards outlined in Appendix E and in The Secretary of the Interior's Standards for the Treatment of Historic Properties (1992); and taking all practicable precautions against damage by fire, vandalism or other cause.

2. Occupying and maintaining the property in conformance with the Lease and any other conveyancing or contractual instruments, and all applicable permits, federal, state and local laws, regulations and the like.

3. Defraying any and all costs (above DCR's agreed upon level of assistance if any) associated with the capital improvement and repairs and maintenance of the property in conformance with the Lease and any other conveyancing or contractual instruments.

4. Paying all applicable local and state taxes or fees that may be associated with the property for the duration of the lease.

5. Maintaining in full force sufficient insurance to cover costs of rehabilitating any partial damage or destruction of the property, including flood coverage for any part of the lease area that falls within a delineated flood zone.

6. Maintaining comprehensive liability insurance for all activities.

7. Indemnifying the Commonwealth against all claims or suits brought as a result of an error or an act or omission by the Curator.

8. Ensuring that the proposed improvements are carried out by person(s) with sufficient qualifications and/or appropriate licensure.

C. Required Improvements

The selected Curator will be responsible for all improvements required to rehabilitate the property to the **Secretary of the Interior's Standards for Historic Rehabilitation** (see Appendix E). The core ideal of these standards is to repair original materials, and only if absolutely necessary, replace missing elements "in kind" with similar materials and design. Minimum expected improvements are outlined in Exhibit B, and include:

- Repair or replacement of all systems and fixtures (heating, plumbing, electrical, etc.)
- Rehabilitation of all doors and windows
- Repair of structurally unsound framing
- Rehabilitation of all exterior trim and siding

These improvements and any others proposed by the Curator will be outlined in a Work Plan and completion schedule that will be incorporated into the lease. These identified improvements assume a business reuse of the property. Any other proposed reuse may require different standards for improvements to meet building code and accessibility requirements.

The estimated cost of the baseline Required Improvements is **$507,886**. **Please keep in mind that the cost estimates represent the value of the work if DCR was to hire contractors to perform all work.** Most Curators leverage some amount of sweat equity towards a good deal of the required work. More detailed estimates are included in Appendix B.

D. Maintenance / Management

The Curator will be responsible for all costs related to the rehabilitation, management and maintenance of the property, including, but not limited to, insurance, utilities, regular and routine maintenance (see Exhibit E for Maintenance Standards and Guidelines).

E. Lease Term

Based on the fair market rent and the value of anticipated work, DCR can offer a **25-year** lease term with two mutually agreeable 5-year extension terms. Alternate proposed lease terms may be considered if supported by sufficient justification.

F. Fair Market Rent

According to the Historic Curatorship Program's Enabling Legislation, DCR must establish a Fair Market Rent (FMR) for the property. For the purposes of this solicitation, DCR is establishing the following rent values based on the FMR values established by the Federal Department of Housing and Urban Development (HUD) for Monterey, Massachusetts (2023). The FMR for any extension terms will be adjusted according to future changes in the Consumer Price Index and/or the HUD FMR values.

U.S. Department of Housing and Urban Development: FY 2023 FMR-3 Bedroom – Berkshire County	
Monthly	$1,745
Annual	$20,940

G. Fulfillment of Rent Obligation

If all rehabilitation, management and maintenance services agreed upon in the lease are performed, no cash rent will be exchanged. In addition to the value of the rehabilitation investment included in the final lease, the Fair Market Rent is also offset by the value of the following:

1. Management and Maintenance Credit

The selected Curator will be credited 10% of the value of the Fair Market Rent annually for the ongoing maintenance of the property (assuming all required maintenance tasks are being performed according to the standards and guidelines established in Appendix E). To recognize the value of the management and occupation of the property (utilities, insurance, fees, any applicable taxes, etc.), the Curator is credited an additional 10% of the value of the Fair Market Rent annually. Management costs in excess of these allowances, including directly related business expenses such as employee salaries, if applicable to the management of the property, can be applied as part of Mandatory Improvement accounting (see below).

Projected Curator Investment vs. Fair Market Rent

Estimated Rehabilitation Costs	**$507,886**
Maintenance Credit (10% of the annual FMR) x 25-year lease	$52,350
Management Credit (10% of the annual FMR) x 25-year lease	$52,350
Anticipated Curator Investment over the lease term	**$633,256**
Total Fair Market Rent, 25-year lease term ($20,940 x 25 years - see section F above)	**$523,500**

Credits accrued above the value of the FMR can be applied to potential extension terms

2. Mandatory Improvements

The value of work performed on Mandatory Improvements can be accrued and applied towards the Fair Market Rent for the base term and any proposed extension terms. *Mandatory Improvements* are unexpected tasks that were not identified in Appendices B and C or the Proposal but are necessary for the continued preservation and occupancy of the property. These improvements are normally capital in nature, and do not include general maintenance (spot repairs, garden maintenance, touch up painting, etc.). General maintenance work is accounted for through the 10% maintenance credit.

For example: Repair begins on interior wall and a rotted corner post is discovered. Since this is a Mandatory Improvement not included in the original assessment, the Curator submits a cost for the repair (materials and labor), and that value can be applied towards the Fair Market Rent for the base term and any extensions.

If a Curator decides to perform *Optional Improvements*, the cost of those improvements cannot be credited towards the Fair Market Rent. Optional Improvements are those projects that are not required for the continued preservation, management or maintenance of the property.

H. Public Benefit

The Historic Curatorship's Enabling Legislation requires that the property be accessible to the public at least twice a year. **The quality and scope of the proposed public benefit beyond this basic requirement is a factor in the evaluation of Curator proposals.** DCR encourages Curators

to coordinate public benefit activities with other park events. Public uses of the property may be limited by code requirements for occupancy. Public benefit examples:

- Maintaining and allowing public access to trails through the property
- Maintaining a web site or blog to document the project
- Coordinating a senior's garden and farm tour
- Sponsoring bi-annual tours of the property
- Partnering with the park on an event or project (Great Park Pursuit, Park Serve Day, etc.)
- Opening a garden to a local youth group as a service project
- Holding a demonstration class highlighting preservation carpentry
- Allowing a local group to use the property for meeting/event space
- Participating in community-wide events or programs

I. Review and Inspection

1. Review by Massachusetts Historical Commission

As required by Massachusetts General Laws Chapter 9, §26 to 27c, as amended by Chapter 254, Acts of 1988, and state regulation (950 CMR 71.00), DCR is required to consult with the Massachusetts Historical Commission (MHC) regarding the proposed rehabilitation of the property. The successful culmination of the MHC consultation process will be a finding by MHC that any work plan associated with a lease has "no adverse effect" on the historic qualities of the property. Following provisional designation, the Curator will submit any proposed alterations to DCR, where the work will be reviewed and forwarded to MHC for review and comment via a Project Notification Form (PNF). MHC has thirty days from the submission of a new project notification to review and comment. Any future changes to the original workplan may require submission of additional PNFs.

2. Inspections and Compliance

DCR reserves the right to inspect all work performed under the Curatorship according to the work items and schedule established in the Work Plan, which will be incorporated into the lease and will serve as the baseline for lease compliance. The State Building and Plumbing Inspectors must review and approve all work to the building and the plumbing, while electrical work, health, fire and safety issues and fire protection fall under the jurisdiction of the local inspectional authority. If applicable, sewer connections or septic system installation / maintenance are regulated by the MA Department of Environmental Protection. The Curator is also responsible for all compliance with all state, local or federal regulations, including but not limited to the Natural Heritage and Endangered Species Program and the Wetlands Protection Act.

3. MEPA Review

In accordance with the Massachusetts Environmental Policy Act (301 CMR §11.27), the Curator will be required to work with DCR in filing an Environmental Notification Form (ENF) if the proposed project triggers any of the thresholds for review (see http://www.mass.gov/eea/agencies/mepa/about-mepa/statute-and-regulations/mepa-regulations.html). After the lease is executed, any new major projects not included in the original scope may also require the Curator to file a "Notice of Project Change" with the appropriate MEPA Unit for review. It is not likely that any proposed reuse of the property would trigger MEPA review.

PART IV – PROPOSAL EVALUATION & SELECTION PROCEDURE

A. Evaluation Team

DCR will convene an Evaluation Team composed of staff and other individuals whose interest or expertise qualifies them to provide advice to the DCR Commissioner. This Evaluation Team will review all proposals and make recommendations to the Commissioner. All information submitted to the Department will remain confidential throughout the evaluation process.

B. Criteria for Evaluation

The following criteria will be used in evaluating all proposals:

Section 1. PROPOSED REUSE (25 total points)
a. Provides for long term preservation of the property (0-5 points)
b. Compatible with DCR's mission to conserve the cultural, natural and recreational resources of the Commonwealth and with the requirements outlined in this RFP (0-5 points)
c. Compatible with the management of the park (0-5 points)
d. Compatible with needs of park users and friend groups, abutting neighbors and the surrounding municipality (0-5 points)
e. Provide additional services, programs, concessions or other direct benefit to park users and the community (0-5 points)

Section 2. EXPERIENCE AND QUALIFICATIONS (20 total points)
a. Specialized skills in historic preservation (0-10 points)
b. Experience and qualifications to undertake, implement and manage the rehabilitation, reuse and maintenance of the property (0-5 points)
c. Examples of pertinent previous work (0-5 points)

Section 3. REHABILITATION / MAINTENANCE / MANAGEMENT PLAN (25 total points)
a. Quality and feasibility of rehabilitation plan, including consideration of sustainable products, systems and technologies (0-10 points)
b. Feasibility and efficiency of proposed schedule / timeline for rehabilitation tasks (0-10 points)
c. Feasibility of Maintenance and Management plan (0-5 points)

Section 4. FINANCIAL CAPABILTY (20 total points)
a. Sources and methods of funding for the rehabilitation of the property (0-10 points)
b. Sources and methods of funding for continued upkeep and maintenance throughout the proposed lease term (0-10 points)

Section 5. PUBLIC BENEFIT (10 total points)
a. Strength of public benefit component beyond twice annual public access (0-5 points)
b. Feasibility of long-term continuation of proposed public benefit component 0-5 points)

C. Curator Selection Process / Timeline

Following the deadline for responses to this RFP, the Curator selection process will be completed in approximately 8-10 weeks. Please note that the schedule provided is an estimate based on past solicitations and may vary. The process will include:

1. Selection Committee selects one or more finalists to meet for an in-person interview with the Committee **(approx. 2-3 weeks following submission deadline**). Proposers selected for an interview will be required to provide a detailed work plan and annual schedule that addresses all items listed in Appendix B.

2. Selection Committee recommends a selected finalist to the Commissioner **(approx. 2-3 weeks following interviews)**. DCR reserves the right to request further information from a Proposer prior to final selection. DCR reserves the right to waive any formalities.

3. Commissioner reviews Selection Committee recommendation **(approx. 3-4 weeks following recommendation)** and if accepted, provisionally designates a Curator for the property.

All Proposers will be notified in writing of this Curator designation. Following designation, the Curator and the Commonwealth will sign a Provisional Lessee Designation Agreement, which is valid for one year. This agreement requires the designated Curator to provide certain assurances, including a more thorough inspection of the property, development of a detailed Work Plan and schedule and proof of insurance and financial capability, before a lease can be executed. During this period, DCR will begin drafting a lease. A lease may be executed any time before the expiration of the Provisional Lease period if all requirements are fulfilled. During the provisional period, DCR and the Curator may agree to enter into a Memorandum of Agreement that would allow certain work, under specific conditions, to begin at the Curator's risk before a lease is executed.

PART V: RESERVATIONS AND CONDITIONS

A. General Reservations

1. DCR makes no express or implied representations or warranties as to the accuracy and/or completeness of any of the information provided as part of this Request for Proposals (the "RFP"), including information that is available upon request. This information is provided subject to errors, omissions, change of cost, lease or conditions, additional changes in and different interpretations of laws and regulations, prior sale, lease or financing.

2. DCR reserves the right to suspend, withdraw or amend this RFP at any time, without notice.

3. DCR reserves the right to seek additional information or revised proposals from respondents or finalists at any time prior to selection of Curators through written notice to all respondents.

4. DCR reserves the right to change the selection process or schedule with written notice to all respondents to the RFP or finalists, as necessary.

5. DCR reserves the right to reject, in its sole discretion, any proposal not submitted in conformance with this RFP and any amendments hereto, or to reject any and all proposals, in its sole discretion, for any reason. DCR further reserves the right to waive or decline to waive irregularities in any proposal when it determines that it is in DCR's best interest to do so.

6. If a lease is not executed with the Selected Curator, DCR may choose to execute a Lease with an alternate Curator from the pool of respondents, to terminate the selection process, or to begin a new selection process.

7. DCR reserves the right to discontinue its selection of any Proposer, or the entire RFP process, for any reason whatsoever or for no reason, prior to the execution of a Lease.

B. Conflict of Interest and Collusion

1. By submitting a proposal, a Respondent certifies that no relationship exists between the Respondent or any of its officers, employees, agents, or representatives and DCR, or any officer, employee, or agent of DCR that constitutes unfair competition or conflict of interest or that may be adverse to DCR.

2. By submitting a proposal, a Respondent certifies that it has not acted in collusion with any other Respondent or other entity doing business with DCR in a way that would constitute unfair competition.

C. Confidentiality

1. Respondents should assume that all material submitted in response to the RFP will be open to the public following the evaluation process, with the exception of the Respondents' personal financial information, which DCR shall endeavor to keep confidential.

2. DCR reserves the right to share any and all ideas from any of the proposals submitted with a selected Curator. No Respondent has proprietary rights to any ideas or materials submitted in its response to the RFP. All material submitted becomes the sole property of DCR.

D. Respondent's Responsibilities

Respondents shall be entirely responsible for verifying construction cost estimates, code requirements, design guidelines, and any other regulatory information. Respondents shall be entirely responsible for verifying all site conditions of the property. Copies and summaries of this information are included in this RFP only as a convenience and DCR is not liable for any mistakes, damages, or other consequences arising from use of this information.

E. Other Legal Issues

1. Conflict of Interest

a. DCR employees are not eligible to participate in the Historic Curatorship Program.

b. Employees of the Commonwealth may participate in the Historic Curatorship Program, provided, however, that they comply with the requirements of Chapter 268A §7.

2. Miscellaneous Provisions

The Department's objective in seeking an outside entity to lease the property is the preservation of the property. For this reason, in the event that the property's historic integrity is significantly destroyed by fire or other cause, DCR reserves the right to terminate the lease, unless both parties agree it is in both parties' interest to apply insurance proceeds to rebuild a similar compatible structure. If DCR does not agree to allow a reconstruction, any proceeds will be distributed based on the amount of investment under the lease. Additionally, in the event of a default by a Curator, DCR reserves the right to terminate the lease. Events of default may include, but are not limited to, the following: 1) failure to comply with the terms and conditions of the lease agreement; 2) abandonment of the premises; 3) Curator bankruptcy.

PART VI - PROPOSAL SUBMISSION

DUE DATE: before 3pm, Wednesday, May 15th, 2024

Showings are by appointment. Please reach out to hcp.requests@mass.gov to schedule.

A. Format

An electronic copy of the Proposal (PDF format) must be sent via email to hcp.requests@mass.gov (attention: Ethan Parsons) before the submittal date and time stated in this Request for Proposals.

Proposals may also be sent via mail to the address below, to be received before the submittal date and time stated in this Request:

Department of Conservation and Recreation
Office of Cultural Resources
State Transportation Building
10 Park Plaza, Suite 6620
Boston, MA 02116

Attn: Ethan Parsons, Historic Curatorship Program Manager

Mailed proposals must be received, not just post marked, by the submission deadline. Confirmation must be made via email or telephone that the proposal was received by the Historic Curatorship Program. Proposers are requested to examine this RFP and the accompanying Table of Contents to make sure that all pages are included. DCR assumes no responsibility for a proposal submitted based on an incomplete RFP package.

Proposers are expected to review all requirements and instructions of this RFP; failure to do so will be at the Proposer's risk. Each Proposer should furnish all the information required by this RFP. DCR reserves the right to waive formalities in any Proposal, and may, if it determines that such action is in the best interests of the Commonwealth, select a Proposal which does not conform in all details with the requirements of this RFP. Likewise, the Commonwealth reserves the right to reject all Proposals.

This Request does not commit the Commonwealth of Massachusetts to enter into any disposition of real property interest; or to pay any costs, including costs associated with any studies or designs, incurred by any party in the preparation and submission of a Proposal.

Proposals will not be returned but will be retained by DCR for the official record.

B. Inquiries and Explanations

All inquiries concerning this Request for Proposals should be directed to:

Ethan Parsons, Program Manager

Historic Curatorship Program
Department of Conservation and Recreation
Office of Cultural Resources
State Transportation Building
10 Park Plaza, Suite 6620
Boston, MA 02116

hcp.requests@mass.gov

Tel.: (857) 262-4015

Any explanation desired by a Proposer regarding the meaning or interpretation of this Request must be submitted in writing and with sufficient time allowed for a reply to reach the Proposer prior to the submission of their Proposal. Verbal explanations or instructions shall not be binding on the Department.

Any information given in writing to a prospective Proposer will be furnished to all prospective proposers as an amendment to the Request for Proposals if such information is deemed by DCR to be necessary to Proposers in their preparation and submission of Proposals, or prejudicial to uninformed Proposers if they were to lack such information.

C. Proposal

Proposals should follow the outline, supply all of the information described below, and should demonstrate the ability of the potential Curator to undertake a challenging and complex commitment. It is intended that the substance of a Proposal, as approved by the Commonwealth, will be incorporated into all agreements and real property transactions which may result from the process. **Please submit a cover letter with any proposal.**

Proposals must include responses to all applicable sections of this RFP. Proposers may fill in the provided spaces and attach additional sheets or submit a separate document containing responses to each of the twelve sections. If the Proposer chooses the latter option, please provide responses in a similar format, under the same section headings. Electronic (Word and Excel) versions of the application section are available upon request.

PROPOSAL TEMPLATE

Applicant Information

List the names, addresses and telephone numbers of all principals, partners and others participating in the project.

_____

Name

_____

Address

_____

City State Zip

_____ _____

e-mail Telephone

_____

Name

_____

Address

_____

City State Zip

_____ _____

e-mail Telephone

_____

Name

_____

Address

_____

City State Zip

_____ _____

e-mail Telephone

Section 1: Proposed Reuse (25/100 points)

Please provide a narrative summary of the Proposed Reuse concept. DCR is seeking reuses that are compatible with the park and surrounding community and focused on the rehabilitation of the historic resource. Reuses must also comply with the existing conditions of the house and site, including building code requirements, environmental impacts, and the limitations of the septic and water systems. Examples of potentially compatible reuses include short-term vacation guest house, non-profit office and/or program space, and outdoors related small-scale retail. Consideration will be given for reuses that serve or benefit underserved communities or populations.

Describe, at a minimum, how the proposed reuse concept meets the following criteria:

a. Provides for long term preservation of the property (0-5 points)
b. Compatible with DCR's mission to conserve the cultural, natural and recreational resources of the Commonwealth (0-5 points)
c. Compatible with DCR's management of the park (0-5 points)
-*Would the proposed reuse present additional burdens to DCR in terms of significantly increased cost or staff time?*
d. Compatible with needs of park users and friend groups, abutting neighbors and the surrounding municipality (0-5 points)
-It is encouraged that responses to this section be accompanied by written expressions of support
e. Provide additional services, programs, concessions or other direct benefit to park users and the community (0-5 points)

Section 2: Experience and Qualifications (20/100 points)

Provide a narrative summary of experience and qualifications to undertake, implement and manage the rehabilitation, reuse and maintenance of the property. Supplemental material describing pertinent projects, including visual aids, is encouraged but not required. Specifically address the following criteria:

a. Specialized skills in historic preservation (0-10 points)
-Including possession of any certifications and licenses in trades and skills pertinent to the rehabilitation
b. Experience and qualifications to undertake, implement and manage the rehabilitation, reuse and maintenance of the property (0-5 points)
- Including but not limited to business management skills, project management skills, experience in non-profit development / management)
c. Examples of pertinent previous work (0-5 points)

Section 3: Rehabilitation / Maintenance / Management Plan (25/100 points)

Curators are responsible for the **rehabilitation**, **maintenance** and **management** of the historic property. The success of any Curatorship relies on a strong and feasible rehabilitation plan, as well as a plan for projected management and maintenance costs and improvements over the long term. This section should outline the proposed plan to address all three areas:

3a. Rehabilitation Plan (0-10 pts)

1. Rehabilitation Plan Summary
2. Rehabilitation Pro Forma
3. Lease Term
4. Inclusion of sustainable practices, products and technologies

3b. Proposed schedule / timeline for rehabilitation tasks (0-10 points)

1. Narrative statement on proposed rehabilitation schedule
2. Rehabilitation Schedule Template

3c. Maintenance and Management Plan (0-5 pts)

1. Narrative statement
2. Estimated Costs

Please see the following pages for details on each area.

Section 3a

Rehabilitation Plan Summary

This section should specify how the Proposer intends to carry out the Rehabilitation phase of the project, including the Required Improvements listed in Appendix B. Please use this section to propose eliminating, adding, or changing any Required Improvements and provide justification.

1. Narrative statement describing rehabilitation plan in general.

2. Rehabilitation Pro forma

These priority tasks are derived from the Conditions Assessment Reports (Appendix C). Costs reflect markups as described in the report, including allowances for permits, engineering and architectural design fees, etc. Please keep these costs in mind when estimating, as some construction permits may require professional design services. This list represents the priority rehabilitation tasks; however, the proposal may add or remove items from this list based on the proposed reuse and rehab plan. A finalized work plan will be incorporated into the lease.

Please keep in mind that the cost estimates represent the value of the work if DCR was to hire contractors to perform all work. Most Curators leverage sweat equity towards a good deal of the required work. Please indicate proposed actual costs for these tasks. The DCR estimated value will be the amount credited towards the fair market rent, since it represents the true value of the work to the Commonwealth. The estimates provided do not include unforeseen capital improvements in the future that are also the responsibility of the Curator.

*Note: Some cost estimates vary from those provided in the original Conditions Assessment due to updated comparable projects. These cost estimates take precedent over those provided in the Conditions Assessment

Category	Task Description	DCR ESTIMATE	Proposed Estimated Cost	To be Completed in Year:
Existing Conditions-Demolition	Demolition	$26,500		
Concrete	Mech Equipment Pads	$1,908		
Masonry	Stone chimney restoration	$12,720		
	Brick chimney restoration	$12,720		
Structural Work	Allowance for additional structural assessment	$15,900		
	Allowance for additional structural work	$53,000		
Wood, Plastics and Composites-Finish Carpentry	Retore / Replace interior trim	$4,757		
	Restore and retain built-ins	$1,590		
Thermal + Moisture Protection-Damp-proofing,	Foundation damp-proofing	$6,360		
	Insulate foundation	$848		
	Insulate exterior walls	$10,108		

Waterproofing and Sealants	Insulate roof	$5,720		
Thermal + Moisture Protection-Roofing+Flashing	Metal flue flashing	$106		
	Stone chimney flashing	$106		
	Brick chimney flashing	$106		
Openings-Door Opening Assemblies	Repair and retain existing doors	$530		
	New interior doors, frame and finish hardware	$10,600		
Openings-Hardware	Upgrade existing hardware	$1,590		
Openings-Windows	Window frame assembly repair, incl. blocking and sealing	$33,072		
	New walls-skim coat to match plaster	$15,162		
Finishes-Gypsum Board	New ceilings-skim coat to match plaster	$15,162		
	Subflooring	$12,126		
Finishes-Flooring	Finish flooring	$15,158		
	Restore board flooring	$12,122		
	Interior painting	$7,581		
Finishes-Painting	Extinguishers	$80		
Fire Suppression	Smoke + CO2 detectors	$318		
	Plumbing-Demolition	$7,950		
Plumbing	New piping and connections	$30,324		
	Fixtures allowances (toilets, sinks, shower, tub)	$15,900		
	New heat source, including all ductwork, fixtures, inspections, permitting, etc.	$101,082		
HVAC	Electrical-Demolition	$7,950		
Electrical	Electrical - all new panel, wiring and fixtures	$25,270		
	Driveway and parking	$7,950		
Exterior Improvements-Landscaping	Planting / landscaping allowance	$26,500		
Utilities	Internet	$530		
	Kitchen appliances / allowance	$4,240		
	Allowance / washer + dryer	$4,240		
	TOTAL	**$507,886**		

Section 3a cont.
3. Lease Term (optional)

If proposing an alternative term to the offered 25 years with the option of 2-mutually agreeable 5-year terms as an extension, please describe. Include justification for the proposed term by describing any additional proposed investment or services. DCR reserves the right to accept or refuse any alternate lease term as part of the evaluation and selection process.

4. Inclusion of sustainable practices, products and technologies.

Describe elements of the rehabilitation / maintenance and management plans that utilize environmentally sustainable techniques and / or products. Plan should consider Massachusetts' Executive Order No. 594: LEADING BY EXAMPLE: DECARBONIZING AND MINIMIZING ENVIRONMENTAL IMPACTS OF STATE GOVERNMENT and specifically Section 7 Guidelines for Existing Buildings.

Section 3b
Rehabilitation Schedule / Timeline for Rehabilitation tasks (0-10 points)

1. Narrative statement on proposed rehabilitation schedule. Proposed schedules will be evaluated for feasibility and efficiency (with an emphasis on prompt occupancy).

Section 3b cont.

2. Rehabilitation Schedule Template

Please include a general schedule with milestones for all improvements listed above, grouped by the year work will occur. A more detailed schedule will be required before lease execution. Use the format below or another that clearly indicates expected annual rehabilitation costs. Identify the proposed occupancy date.

Schedule should prioritize tasks that will:

- Facilitate occupancy as soon as possible
- Address immediate threats to the property or pose safety hazards
- Improve the exterior / public view of the property

This table is an example. An Excel version of this and other tables in the application section are available upon request.

Task		Proposed cost
2024	**Month / month range**	
Task 1	Jan-March	$
Task 2	Jan-March	$
Task 3	March-April	$
Task 4	May-August	$
Task 5	August-November	$
Annual Rehabilitation Subtotal		$
2025		
Task 6	Jan-Mar	$
Task 7	Jan-Mar	$
Task 8	Mar-Apr	$
Task 9	May-Aug	$
Task 10	Aug-Nov	$
Task 11	Oct-Dec	$
OCCUPY PROPERTY	Dec.	
Annual Rehabilitation Subtotal		$
2026		
Task 12	Jan-Mar	$
Task 13	Jan-Mar	$
Task 14	Mar-Apr	$
Task 15	May-Aug	$
Annual Rehabilitation Subtotal		$
2027		
Task 16	Jan-Mar	$
Task 17	Jan-Mar	$
Task 18	Mar-Apr	$
Annual Rehabilitation Subtotal		$
ADD ADDITIONAL YEARS IF NECESSARY		

Section 3c.

1. Maintenance and Management Plan-Narrative Statement

Use this section to identify anticipated costs related to ongoing maintenance and management of the property. Maintenance costs including mowing, roof repairs, repointing, mold remediation, pest control, maintaining mechanical systems, etc.

Management costs include those related to the operation and occupancy of the property, including insurance, utilities, applicable fees and taxes, etc.

2. Maintenance and Management Plan-Estimated Costs

Use this table or another format to estimate annual costs for the maintenance and management of the property. The cost estimates for maintenance should consider average costs in a given year and anticipate unforeseen major repairs that may have to be done over the term of the lease (roof replacement, repainting, etc).

Annual Maintenance Estimate	$
Annual Management Estimate	
Insurance	$
Utilities	$
Fees / taxes	$
Anticipated Major Cyclical Repairs	$
Other costs	$
Annual Management Estimate-TOTAL	$

Section 4: Financial Capability (20/100 points)

This section is used to determine the Proposer's financial prospects for implementing the requirements of this RFP. All information will remain *confidential.* In this section provide information that addresses the projected sources of income for the rehabilitation phase of the project, as well as the ongoing maintenance and management expenses throughout the term of the lease.

- Financial plan must include specific sources and amounts
- Plan must not rely heavily on volunteer labor or anticipated grants and fundraising without written commitment
-Plan should include information about in-hand funds
-Plans for use with profit-based financing should be based on market research and precedent

a. Sources and methods of funding for the rehabilitation of the property (10 points)

Provide a brief narrative statement of the overall financial plan:

b. Sources and methods of funding for continued upkeep and maintenance throughout the proposed lease term (10 points)

Provide a brief narrative statement of the overall financial plan

c. Supporting Data

Anticipated Income Pro Forma

Use the table below to compare estimated income with expected costs (from previous sections).

(Attach more detailed breakdowns if desired. If this proposal is selected as a finalist, Proposer may be required to provide more detailed projected cost and income information).

2024		
Income source	Estimated income	
Source 1	$	
Source 2	$	
Source 3	$	
TOTAL 2024 Income		$
Annual Rehab Subtotal	$	
Annual Estimated Maintenance costs	$	
Annual Estimated Management costs	$	
Total 2024 costs		$

2025		
Income source	Estimated income	
Source 1	$	

Source 2	$	
Source 3	$	
TOTAL 2025 Income		$
Annual Rehab Subtotal	$	
Annual Estimated Maintenance costs	$	
Annual Estimated Management costs	$	
Total 2025 costs		$

2026		
Income source	Estimated income	
Source 1	$	
Source 2	$	
Source 3	$	
TOTAL 2026 Income		$
Annual Rehab Subtotal	$	
Annual Estimated Maintenance costs	$	
Annual Estimated Management costs	$	
Total 2026 costs		$

2027		
Income source	Estimated income	
Source 1	$	
Source 2	$	
Source 3	$	
TOTAL 2027 Income		$
Annual Rehab Subtotal	$	
Annual Estimated Maintenance costs	$	
Annual Estimated Management costs	$	
Total 2027 costs		$

For all remaining lease years following completion of major rehabilitation (anticipated average per year)		
Income source	Estimated income	
Source 1	$	
Source 2	$	
Source 3		
	$	
TOTAL anticipated annual Income		$
Annual Estimated Maintenance costs	$	
Annual Estimated Management costs	$	
Total Annual costs		$

Bank References

Lending Institution	Name of Lender	Address	Phone

Bankruptcy Disclosure

If the Proposer or any affiliated business entity of the Proposer or any of the entity's officers, principal, or investors has been adjudged bankrupt, either voluntarily or involuntarily, within the last ten years, please note the date and location of the judgment and the name of the party involved.

Section 5: Public Benefit (10/100 points)

The Historic Curatorship Enabling Legislation requires that properties be accessible to the public at least twice annually. DCR encourages reuses that provide a provide a benefit or amenity to park visitors and the public in general.

a. Describe the proposed scope and nature of the Public Benefit Element, and any projects / programs / services that will fulfill and/or exceed this requirement (0-5 points).
b. Describe how the proposed public benefit will be sustained throughout the term of the lease (0-5 points).

Section 6: Disclosures

a. Organizational Structure (if applicable)

If the Proposer is acting officially on behalf of an organization, please describe fully the nature of the organization, including:

1. Describe legal structure of the general partners

2. Describe the legal history of the organization

3. Attach a copy of any joint venture agreement, articles of incorporation or trust agreement establishing the organization.

4. Corporate Structure (if applicable)

Please disclose if the Proposer or any other member of the development entity is a subsidiary of or affiliated with any other corporation or firm. Attach references for the development team and/or team members. Please attach an audited financial statement for the general partners and/or the principal development entity. These statements will be held in strict confidence by the Commonwealth.

a. Tax Compliance

Pursuant to MGL Chapter 62C, Section 49A*, I, hereby certify that I have filed all state tax returns, have paid all state taxes required under law, and have no outstanding obligations to the Commonwealth of Massachusetts, Department of Revenue.

Signed under the pains and penalties of perjury on this _____ day of 20_____.

_____ _____

Federal Tax ID No. Signature

* "No contract or other agreement for the purposes of providing goods, services or real estate space to any ... agencies [of the Commonwealth] shall be entered into, renewed or extended with any person unless such person certifies in writing, under penalties of perjury, that he had complied with all laws of the Commonwealth relating to taxes."

b. Disclosure Statement Concerning Beneficial Interest

I hereby state, under the penalties of perjury, that the true names and addresses of all persons who have or will have a direct or indirect beneficial interest (including the amount of their beneficial interest accurate to within one-tenth percent) in the proposed project are listed below:

NAME AND RESIDENCE OF ALL PERSONS WITH SAID BENEFICIAL INTEREST:

NAME ADDRESS PERCENTAGE INTEREST

_____

_____

_____

_____

_____

_____

_____

_____

The undersigned also acknowledges and states that none of the above-listed individuals is an official elected to public office in the Commonwealth of Massachusetts or is an employee of the Commonwealth.

I hereby state, under the penalties of perjury, that the names and addresses of all the firms and personal corporations employing attorneys, real estate brokers, architects, engineers, planners, and surveyors, and all other agents who have acted on behalf of any of the foregoing with respect to this proposal are listed in **Section 1**, above.

SIGNED under the penalties of perjury.

_____
Signature

_____
Date

c. Conflict of Interest

The Proposer covenants that he/she will not employ or retain any company or person (other than a full-time bona-fide employee working for the Proposer) to solicit or secure any agreement related to this RFP, and that he/she has not/will not pay any company or person (other than such an employee) any gift, contribution, fee, commission, percentage, or brokerage fee, contingent upon or resulting from the execution of any agreements.

No member, official or employee of DCR or DCAMM shall have any personal interest, direct or indirect, in any agreement entered into or in the lessee, nor shall any such member, official or employee participate in any decision relating to any agreements which affects his / her personal interest or the interests of any corporation, partnership, or association in which he/she is, directly or indirectly, interested. No member official or employee of DCR or DCAMM shall be personally liable to the lessee or any successor in interest in the event of any default or breach by the Commonwealth or for any amount which may become due to the lessee or to its successor or on any obligations under the terms of this RFP or any agreements which follow. For the purpose of this statement, employees of either agency shall be deemed to include so-called dependent (03) consultant employees.

Date: _____ By: _____

d. Anti-Discrimination

The Proposer agrees that in the construction of the improvements and otherwise through any agreements made hereafter, it shall cause all contractors, tenants and users to comply with all applicable laws, ordinances, regulations and orders from time to time in effect relating to nondiscrimination, equal employment opportunity, contract compliance and affirmative action.

Date: _____ By: _____

PART VII: APPENDICES

A. DEFINITIONS

B. REQUIRED REHABILITATION TASKS AND COST ESTIMATES

C. BUILDING CONDITIONS SURVEY+FLOOR PLANS

D. PRESERVATION STANDARDS AND CRITERIA

E. MAINTENANCE GUIDELINES

F. HISTORIC CURATORSHIP ENABLING LEGISLATION

APPENDIX A:
DEFINITIONS

APPENDIX A: DEFINITIONS

For the purpose of this Request for Proposal, the following terms shall have the following meanings unless the context otherwise specifically indicates. In some instances, preservation terms have been defined according to the Secretary of the Interior's Standards for the treatment of Historic Properties. Those terms are identified with the notation (SI).

1. Accessibility: In 1990, Congress passed the Americans with Disabilities Act (ADA), which expanded accessibility requirements beyond federal government buildings to state and local government buildings as well as the private sector. The ADA recognizes and protects the civil rights of people with disabilities and is modeled after earlier landmark laws prohibiting discrimination on the basis of race and gender. The ADA requires that buildings and facilities be accessible to and usable by people with disabilities. DCR, through its Universal Access Program and other initiatives, is committed to providing accessible facilities for all visitors.

2. Adaptive Reuse - use of the property in such a way that it retains and reinforces historic character and architectural integrity while accommodating contemporary use.
(SI)

3. Building Conditions Appraisals – Reports produced by DCR documenting the conditions of a property's structural systems, plumbing, heating and electrical systems, exterior and interior finishes, building code, accessibility and historic preservation priorities

4. DCAMM - the Division of Capital Asset Management and Maintenance, Commonwealth of Massachusetts, One Ashburton Place, 15th Floor, Boston, MA 02108

5. DCR - the Department of Conservation and Recreation of the Commonwealth of Massachusetts, Division of Planning, Design and Resource Management, Office of Cultural Resources, 251 Causeway Street, 7th Floor, Boston, MA 02114

6. General Laws - the General Laws of the Commonwealth as amended including any rules, regulations and administrative procedures implementing said laws.

7. Historic Fabric - material remains of a historic building, structure or landscape; either original materials or materials incorporated in a subsequent historically significant period as opposed to materials utilized to maintain or restore the structure during a non-historic period. (SI)

8. Historic Integrity - the authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic period. (SI)

9. Historic Property - any site, building, or structure included which has been deemed by the Department of Conservation and Recreation to be significant to the history of the Massachusetts state forest and park system or which is included or has been determined by the Massachusetts Historical Commission to be eligible for inclusion on the National Register of Historic Places.

10. Mandatory Improvements - work necessary for the rehabilitation of the property as set forth in the Building Conditions Survey or an alternative rehabilitation plan proposed by the Curator & approved by DCR.

11. Lease - a written contract by which rights of use and possession in land, structures and/or buildings is given to another person for a specified period of time for rent and/or other consideration.

12. Management Services - Work and expenditures not considered improvements or maintenance services which allow for the occupancy and management of the property, including utilities, insurance, legal fees, public benefit component; etc. DCR retains the right to determine whether services are considered essential to the management of the property.

13. National Register of Historic Places – The National Register of Historic Places is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The National Register is administered by the National Park Service, which is part of the U.S. Department of the Interior. Listing in the National Register contributes to preserving historic properties in a number of ways:

- Recognition that a property is of significance to the Nation, the State, or the community.
- Consideration in the planning for Federal or federally assisted projects.
- Eligibility for Federal tax benefits.
- Qualification for Federal assistance for historic preservation, when funds are available.

14. Preservation - the act or process of applying measures to sustain the existing form, integrity, and material of a structure or landscape. [This includes initial stabilization work where necessary, as well as on-going maintenance.] (SI)

15. Preservation Maintenance - the act or process of applying preservation treatment to a site or structure. This includes housekeeping and routine and cyclic work scheduled to mitigate wear and deterioration without altering the appearance of the resource, repair or replacement in-kind of broken, or deteriorated elements, parts or surfaces so as to keep the existing appearance and function of the site or structure, and emergency stabilization work necessary to protect damaged historic fabric from additional damage. (SI)

16. Program Manager - the individual assigned by the Commissioner to be responsible for coordinating and managing all activities of the Department under the Historic Curatorship Program.

17. Provisional Lessee Designation - agreement in which a proposer is designated as the selected Curator. Terms and conditions are outlined which must be satisfied prior to the execution of a lease between the Commonwealth and the Curator.

18. Public Benefit – Any programs, projects or other activities that allow the public to appreciate the historic qualities of the Curatorship property equal to or beyond the two annual public access opportunities required by the Historic Curatorship Program Enabling Legislation.

19. Reconstruction - the act or process of accurately reproducing a site or structure, in whole or in part, as it appeared at a particular period of time. (SI)

20. Rehabilitation - the act or process of returning the property to a state of utility through repair or alteration that makes possible an efficient contemporary use while preserving those portions or features of a property that are significant to its historical, architectural, and cultural values. (SI)

21. Restoration - the act or process of recovering the general historic appearance of a site or the form and details of a structure, or portion' thereof, by the removal of incompatible natural or human caused accretions and the replacement of missing elements as appropriate. For structures, restoration may be for exteriors and interiors, and may be partial or complete. (SI)

22. Memorandum of Understanding - revocable agreement between DCR and the designated Curator which allows the rights of use and access to the property, subject to specific conditions, between the time the Curator is provisionally designated and the execution of the lease for a period up to three years.

23. Sustainable Design - Sustainable design seeks to reduce negative impacts on the environment, and the health and comfort of building occupants, thereby improving building performance. The basic objectives of sustainability are to reduce consumption of non-renewable resources, minimize waste, and create healthy, productive environments. Sustainable design principles include the ability to: optimize site potential; minimize non-renewable energy consumption; use environmentally preferable products; protect and conserve water; enhance indoor environmental quality; and optimize operational and maintenance practices. (Definition from General Services Administration)

(SI) From the Secretary of the Interior's Standards for the Treatment of Historic Properties
https://www.nps.gov/tps/standards.htm

APPENDIX B:
REHABILITATION COST ESTIMATES

Disclaimer: DCR is providing these cost estimates for informational purposes only. These estimates are the assumed cost if the DCR were to perform the work items listed herein.

	Est. 2023 cost	unit	quantity	total
Existing Conditions-Demolition	$26,500	LS	1	$26,500
Concrete				
Mech Equipment Pads	$53	SF	36	$1,908
Masonry				
Stone chimney restoration	$32	SF	400	$12,720
Brick chimney restoration	$32	SF	400	$12,720
Metals				
Wood, Plastics and Composites-Rough Carpentry				
REMAINING STRUCTURAL WORK				
Allowance for additional structural assessment	$15,900	LS	1	$15,900
Allowance for additional structural work	$53,000	LS	1	$53,000
Wood, Plastics and Composites-Finish Carpentry				
Restore / Replace interior trim	$4	LF	1,122	$4,757
Restore and retain built-ins	$530	EA	3	$1,590
Thermal + Moisture Protection-Damproofing, Waterproofing and Sealants				
Foundation damp-proofing	$8	SF	800	$6,360
Insulate foundation	$8	LF	100	$848
Insulate exterior wall	$4	SF	2,384	$10,108
Insulate roof	$4	SF	1,430	$5,720
Thermal + Moisture Protection-Roofing+Flashing				
Metal flue flashing	$11	LF	10	$106
Stone chimney flashing	$11	LF	10	$106
Brick chimney flashing	$11	LF	10	$106
Openings-Door Opening Assemblies				
Repair and retain existing doors	$265	EA	2	$530
New interior doors, frame and finish hardware	$2,650	EA	4	$10,600
OPENINGS-HARDWARE				
Upgrade existing hardware	$159	EA	10	$1,590
OPENINGS-WINDOWS				
Window frame assembly repair, incl. blocking and sealing	$41	EA	800	$33,072

Disclaimer: DCR is providing these cost estimates for informational purposes only. These estimates are the assumed cost if the DCR were to perform the work items listed herein.

FINISHES-GYPSUM BOARD ASSEMBLY				
New walls-skim coat to match plaster	$6	SF	2,384	$15,162
New ceilings-skim coat to match plaster	$6	SF	2,384	$15,162
FINISHES-FLOORING				
Subflooring	$8	SF	1,430	$12,126
Finish flooring	$11	SF	1,430	$15,158
Restore board flooring	$13	SF	953	$ 12,122
FINISHES-PAINTING				
Interior painting	$3	SF	2,384	$7,581
FIRE SUPRESSION				
Extinguishers	$27	EA	3	$80
Smoke + CO2 detectors	$106	EA	3	$318
PLUMBING				
Plumbing-Demolition	$7,950	LS	1	$7,950
New piping and connections	$13	SF	2,384	$30,324
Fixtures allowances (toilets, sinks, shower, tub)	$15,900	LS	1	$15,900
HVAC				
New heat source, including all ductwork, fixtures, inspections, permitting, etc.	$42	SF	2,384	$101,082
ELECTRICAL				
Electrical-Demolition	$7,950	LS	1	$7,950
Electrical - all new panel, wiring and fixtures	$11	SF	2,384	$25,270
EARTHWORK				
driveway and parking	$7,950	LS	1	$7,950
EXTERIOR IMPROVEMENTS-PLANTING				
Planting / landscaping allowance	$26,500	LS	1	$26,500
UTILITIES				
Internet	$530		1	$530
Kitchen appliances / allowance	$4,240		1	$4,240
allowance / washer + dryer	$4,240		1	$4,240
			TOTAL	**507,888**

APPENDIX C:
BUILDING CONDITIONS SURVEYS

HISTORIC CURATORSHIP PROGRAM — SUPERINTENDENT'S HOUSE
BUILDING SURVEY
BEARTOWN STATE FOREST, MONTEREY, MASSACHUSETTS — MAY 31, 1994

A. General Description and History of House

The Superintendent's House is an el-shaped, one and one-half story building (Figure 1) constructed on a level site. The oldest area, a post-and-beam structure built about 1800, includes a full basement with a concrete floor and mortared fieldstone walls; a 7'-7" foot high first floor with a kitchen and three large rooms; and a 6'-3" foot high second floor with four bedrooms and one bathroom. Shed dormers were added to the roof in modern times to improve the headroom in the bedrooms. The attic is low and unusable under the remaining upper area of the original roof.

The newest area is a one story wing, forming the el, that was built during the 1930's depression at the direction of the first park superintendent. Also built as a post-and-beam structure, it is over an inaccessible crawl space and consists of one room with a large rustic, stone fireplace at its east wall.

The total occupiable space in the first and second floors is 2,300 square feet. With the basement contributing another 800 square feet of useable space, the total useable space is about 3,100 square feet.

Because the eave of the wing is lower than the eave of the older part of the house, a section of the original wall "fabric" is encapsulated inside the attic of the wing (Figure 2). Instead of stud wall framing, the wall structure consists of two-inch thick vertical planks attached to the outside of the timber frame. Thick, unpainted seven inch wide weatherboards are shaved along their upper, lapping edge, leaving a five inch exposure. The inside surface of this wall is sheathed with horizontal boards and finished with wallpaper. A simple trim board and tilted eave soffit complete the wall construction. The planked wall is fairly common in houses built shortly after the Revolutionary War in the western areas of Massachusetts, New Hampshire and Vermont. Unusual, however, is the combination of the vertical plank construction with traditional post construction. According to Jan Lewandoski, an intellectual traditional framer who works in Vermont,

> "The planks took the place of posts, studs, braces and sheathing and formed a single plane wall surface anywhere from 1-1/2 to 4 inches thick. Planks applied to complete timber frames (or ones lacking diagonal braces and minor studs) were known in seventeenth century New England."

The interior of the house is characterized by exposed timbers and purlins and plank wall paneling on the second floor. The construction of the oldest part of the house appears to be a combination of contemporary and archaic techniques.

Except for certain structural and other minor issues discussed below, the house is in good overall condition.

B. Description and Condition of Structural Systems

Roof. The original roof framing, visible in the attic, consists of handhewn rafters five by four inch notched, lapped and pegged together at the ridge; there is no ridge beam. They have been cut off where they intersect the plane of the ceiling below. It appears that the original timber wall plate was also removed to accommodate the shed dormers and this timber was then used as a beam to carry the cut off ends of the rafters (Figure 3). Found just above the ceiling, these "beams" are supported on four posts located in the hall at the stairs.

The high ends of the shed dormer rafters, consisting of modern 2x6 at 24 inch centers, were laid directly on top of the old wood shingles and were toe-nailed through to the sheathing. The low ends bear on new stud walls built up to form the dormer walls. They are only adequate to carry 24 psf or 16 psf less than the 40 psf snow load required by the Building Code. However, there does not appear to be the sagging one associates with undersized rafters; the dormer roofs vibrated considerably, though, when jumped on.

The weight of the new and old upper portions of the roof is carried on a jerry-rigged beam and post system, as discussed above. Three of the four posts appear to sit over first floor walls; the fourth post, above the kitchen, simply sits on the floor where a noticeable sag has occurred.

> Although the present kitchen arrangement is serviceable, renovation should include extending a nearby wall so that a post can be located directly under the one above. With a little effort, it may be possible to jack the sag out of the floor.

The roof framing of the addition consists of 2x4 rafters at 24 inch centers with alternating collar ties; they are adequate to carry 30 psf snow load or 10 psf less than the 40 psf required by the Building Code. A separate joist system supports the ceiling.

Floors. Although the second floor ceilings were finished, two heavy timber beams framing from front to back across the width of the house were visible on either side of the original chimney area. Purlins were also visible through the ceiling of the northwest room. This framing was in good condition but with the usual sagging associated with early post-and-beam construction.

The first floor framing, visible in the basement, has been modified many times throughout the house's history. Similar to the second floor framing, two heavy timbers (6x8 and 8x8) span the width of the house on either side of the chimney mass. Intermediate framing ranges from apparently original half-log purlins to modern 2x10 joists. A variety of wood and steel posts are arranged throughout the basement; some of the wood posts are rotted on their bottoms from sitting on the damp floor. The framing has been modified to accommodate in an expedient manner whatever first floor improvements were made or to reinforce decayed elements (Figure 4). The first floor at the west entrance sags three inches in four feet; the floors at the south side sag one inch in four feet toward the partition.

> The first floor framing should be selectively removed and replaced with properly designed beams, posts and footings to carry the loads required by the State Building Code. Sound, intermediate framing may remain but should be reinforced to carry the required loads.

Foundations and Sills. The basement walls are mortared fieldstone in generally good condition. There is some dampness due to weeping of water through the stones for about four to five feet above the floor. The stone stairs leading out of the basement through the bulkhead are functional but irregular (Figure 5).

Small stone-lined window wells occur at the basement windows. As catchments for leaves and water the windows frames are in poor condition. Most of these windows are presently protected with shingled hutches (Figure 6).

C. Description of Plumbing, Heating and Electrical Systems

Plumbing. The water source reportedly is a well. A one inch galvanized or lead pipe enters the basement through the foundation wall near the bulkhead and is connected to a 1/2 inch copper pipe that feeds a severely rusted, 80 gallon Sepco electric hot water heater (Figure 7). All piping is disconnected. There is no pump or cold water storage tank. Supply piping is copper and drainage piping is PVC. The fixtures in both bathrooms and kitchen are basic and functional (Figures 8 and 9).

Central Heating. A forced hot air furnace with a Beckett oil burner is located in the basement where it vents into a masonry chimney. There is also a Royall hot air wood fired furnace located on the other side of the basement; this unit's flue empties into a double-wall prefabricated metal chimney. Both heating systems appear to be operable but they should be tested and tuned. The existing ductwork needs tape at the seams and more insulation. There is a 275 gallon fuel storage tank that is in fair condition; however, it should be replaced.

Electrical. The overhead service from the street is currently energized. There is a 100 amp electrical panel in the basement with overload protection by circuit breaker. Distribution wiring is a combination of nonmetallic sheathed cable and BX armored cable (Figure 10). There are typically three duplex outlets in each room but few switches. The entire electrical system including service entrance, wiring, and devices should be checked by a licensed electrician and upgraded as needed.

D. Description of Exterior Elements

Roofing. The roof shingles are fairly new and in good condition; some darkening of their light color, perhaps from mildew, has occurred on the north surface of the wing. However, there are several defects present in the roof system:

1. The flashing is incorrectly installed above the back door. It appears that there are two pieces of flashing. One is an inner piece correctly placed but with a large gap on its vertical edge; the other piece lays directly on top of the roof and allows water to enter from underneath and at its side (Figure 11).

2. The flashing is incorrectly installed between the small or east dormer wall and the roof. It has been woven into the clapboards so that there results a vertical gap and a vertically exposed edge that wind driven rain can penetrate.

3. The edges of the roof sheathing carry over the top of the facia trim and bargeboards rather than being covered by them. This results in the vulnerable end grain of the sheathing being exposed to the weather and allows rain to weep under the sheathing into the soffit.

It does not appear that the oldest area of the house ever had gutters. The only gutter occurs at the south side of the wing. It is full of organic debris and moss; a butt joint is rotted.

The soffits and facia appear to be in good condition. The eastern eave appears to be original with its tilted facia boards covering the ends of the rafters and lack of any overhang. The eight inch or wider sloping soffits elsewhere around the roof were probably added when the dormers and el-addition were built.

Walls and Siding. The exterior siding has been recently painted, albeit over old, tight paint, and is generally in good condition. There is some paint peeling on the north side of the house, however. The clapboards are in good condition with a four inch exposure, generally, but with some of the original weatherboards still in place here and there.

The bottom clapboards are at or close to the ground surface and have the punkiness and moss characteristic of being in frequent contact with moisture. However, these clapboards appear to lap over the top of the foundation by about four to six inches and therefore are somewhat sacrificial in that they protect the foundation mortar joints.

The corner posts boards are in good condition and are freshly painted. At the northwest corner, though, a crude hole has been made through the board and a telephone line mounting bracket has been connected directly to the corner post. But for the partial protection of the overhanging soffit, this is an entry point for water into the structure of the building.

At the present time there are no gable vents in the attic nor any soffit vents. However, as seen on the inside of the attic, gable vents or windows once existed at both ends of the attic (Figure 13).

Windows. The oldest windows are six over six sash windows in the wing and two over two in the original house. None of these windows appear to be original to the oldest construction. Besides the sash windows, the dormers have inward swinging casement windows except for the bathroom, which has new, outward swinging Anderson windows. There are also small, square, fixed windows at both ends of the second floor gable.

New aluminum screen and storm sets cover all but one window on the north side. Except for this one window, all window sashes, sills and trim boards have been recently restored and painted and are in excellent condition (Figure 12). The one window has the storm frame in place but the glass and screen are missing; the paint on the this window's muntins and stiles is peeling (Figure 14). The sill at this window is also punky.

Doors, Entries, Porches. There are four entrance doors ranging from the Italianate styled double arch glazed door at the west entrance to the solid four panel door at the south entrance to the wing. Hardware ranges from old brass to common hardware store handles. Combination screen and storm doors are on three of the four doors. The west door does not have an outer door; here, also, the porch lamp is broken.

Two small sitting porches are on the south and west sides. Both porches appear to be in good condition, their floors having been rebuilt recently with pressure treated decking and untreated posts. However, the southwest post of the west porch is rotten out at the bottom where base trim covers the post.

E. Description of Interior Elements

Flooring. The original pine floors on the first level have been covered with either linoleum or strip oak except for the parlor which still retains 8 to 10 inch wide pine boards. The linoleum flooring in the kitchen, entry and first floor bath is in poor condition and should be removed and replaced with new underlayment and seamless flooring or pine. The strip oak in the living room, dining room and superintendent's office is in good condition but in need of refinishing. The superintendent's office also needs to have a small area replaced. The second floor bathroom has a new seamless floor while the four bedrooms retain the original pine flooring. These floors, which vary in width from 12 to 20 inches, are in need of refinishing. The stair treads and risers are pine and require sanding and refinishing also. The 8 to 15 inch second floor hall flooring is irregular in elevation and shows signs of patching, the cut lines run on common seams. This floor pitches about one inch in four feet. Minor replacement of wood baseboards is needed throughout the house.

Walls and Ceilings. The walls are probably uninsulated but the portion of the attic floor under the original roof structure is overlain with eight inches of unbacked fiberglass batt insulation (Figure 13).

Minor decorating work, such as wallpapering, patching and painting of plaster walls is all that is needed in the kitchen, entry, bathrooms and some bedrooms (Figure 15). However, the parlor and living room need major work on the walls in order to restore them insofar as they are covered with an inexpensive, prefinished paneling, presumably over existing cracked plaster. The superintendent's office is completely finished (walls and ceiling) with plywood and batten. The dining room walls are finished in v-match pine five to seven inches in width and need only a fresh coat of varnish. Some of the walls in the second floor rooms appear to be original and feature plaster and vertical pine boards up to 30 inches wide (Figure 16). The wide boards, which also occur on the stairway walls, are the finest feature of the house.

Most ceilings are plaster between exposed wood purlins and need some patching and painting. The living room ceiling, however, has homesote with battens at 40 inches on center; it can be expected that the original plaster ceiling above this material needs repair. Some of the second floor ceilings have been patched with drywall, but the joints were never taped and spackled.

One of the small second floor rooms that is still under the original roof is an intact original room. While the plaster on the sloped ceiling is heavily damaged, the hand-riven lath is in good condition (Figure 17).

Doors and Woodwork. The paneled wood doors with hardware on the first floor are generally intact although some refitting is required. Second floor doors are made from two vertical boards with thumb latch type hardware. Window and door casings as well as the wood baseboards are 1x4 painted pine. The base has a molding applied in areas where wallboard was installed over plaster walls. The second floor bedrooms have small closets with some built-in shelving. The superintendent's office contains a fourteen drawer map case with a cupboard above. The drawers are 49 by 46 inches. A hatch above this map case/cupboard afforded access to a low attic space above where some of the original exterior house details were discovered. These details are discussed elsewhere in this report. The dining room features a glass-doored built-in china closet with six drawers underneath. The steel kitchen cabinets, although small, are serviceable.

Determining whether or not the woodwork paint contained lead was not included in this inspection work; a certified tester should be retained to verify this, if necessary.

Stairs. The pine stairs from the first to the second floor are very simply detailed. The sidewalls contain boards up to 30 inches wide. The risers are seven inches and the treads are ten inches, a very comfortable ratio. There is an unusual four foot square overlook with an exterior window at one end of the stair.

Fireplaces and Chimneys. The fireplace in the el (superintendent's office) is of mortared stone with a flagstone hearth (Figure 18). There is a stovepipe connection above the seven foot long, 4x8 wood mantle. No original fireplaces remain in the oldest part of the house.

The central brick chimney replaces an earlier chimney that was demolished down to the level of the first floor. It is lined with a clay flue that is cracked at the top. The top two courses of brick are loose and severe vertical cracks occur in the top 12 inches of the chimney where the head joints are two inches wide and the mortar joints overall are deeply eroded from weathering. No flashing was visible at the roof, the base of the chimney being coated with a black mastic (Figure 19).

A stainless steel chimney serving a wood burning appliance is in good condition and properly flashed.

Basement Floor. The basement floor is nominally concrete but is broken up and uneven in several locations.

F. Building Code Issues

Because of the age of the house, it does not comply with many of the requirements of the fifth edition of the State Building Code. The code requirements are found in Article 34. One and Two Family Dwellings. However, the Code does not require a general compliance retro-fitting when renovations are made; rather, at Section 3400.2.4 it simply states that replacement components must comply with current requirements. Therefore nonconforming stairs, egress dimensions, insulation values, etc. need not comply if they are not being altered.

Nevertheless, existing conditions which clearly create a life safety hazard should be upgraded as a matter of common sense. Such hazards include the inadequate support for the structural post at the second floor above the kitchen. Furthermore, certain items should be upgraded as a matter of economy. These would include replacing an inefficient electric water heater and furnace.

The septic system appears to be near a low wetlands, assuming it is located to south of the house. If it is functioning properly, there is no current requirement to upgrade it; if it is not functioning properly, it may be able to be upgraded as a "repair". However, for the purposes of this study, it has been assumed that it will be replaced during renovation work. If it is replaced, a permit may be needed by the local Conservation Commission if it is within 100 feet of a wetland.

Depending on the potential tenants for this property, the building may have to be tested for asbestos and lead paint. This work is beyond the scope of this report and any costs associated with testing and abatement of these materials have not been included in the estimates.

G. Conclusion and Recommendations

Although the house is in good condition, certain systems should be upgraded and repaired. By doing this, the property can be rehabilitated to make it suitable for contemporary use without compromising its historic features. The following recommendations and estimates assume that all renovation work will be in conformance with the United States Secretary of the Interior's Standards for Rehabilitation. Based on the above discussion, the following repairs and replacements are recommended:

1. Insofar as the undersized roof rafters have adequately supported the roof for an extended period of time, do not reinforce the rafters.

2. Extend the kitchen bearing wall or introduce a beam in the kitchen ceiling to support the post above that is carrying roof load.

3. Restructure the first floor framing over the basement to better accommodate the loads superimposed on the first floor. Jack out the worst sags in the floors. Coordinate new basement column and beams locations with the bearing walls and posts above the first floor.

4. Replace basement slab on grade, providing thickened areas for column supports.

5. Replace the basement windows and clean out the window wells.

6. Replace the hot water heater. Provide a new pump and storage tank. Test and chlorinate the well.

7. Tape and insulate the forced hot air ducts; replace the oil tank.

8. Retain a licensed electrician to inspect and upgrade the electrical service as required.

9. Replace the septic system.

10. Repair the flashing and roofing adjacent to the dormers and back entry.

11. Provide new wood trim along the gable roof edges to protect the roof sheathing.

12. Replace the gutters at the el wing with new wood gutters; provide downspouts.

13. Make repairs at the north wall:

    a. Repair the one window with peeling paint and provide a storm and screen sash where they are missing now.
    b. Touch-up peeling paint on the clapboards.
    c. Repair the hole in one of the corner boards.

14. At the west entrance, provide a combination storm door and replace the rotted porch post and broken porch lamp.

15. Reopen the attic vents in the gables; this will involve cutting the clapboards and framing the opening with new trim and inserting new louvers.

16. Patch, paint and redecorate the plastered walls. Restore fallen plaster in the southeast bedroom; tape and finish incomplete drywall. Remove homesote finishes and repair damaged plaster underneath.

17. Refinish the floors and stairs: sand and seal wood floors; remove and replace resilient materials.

18. Tear down the brick chimney to the roofline and rebuild with proper flashing, jointing and flue liner.

H. Renovation Costs

Based on the above recommendations, costs were estimated for renovating the Superintendent's House. These are shown in the Appendix A estimating forms. These estimates are intended to be used for planning purposes only. Because the estimator does not have control over market conditions or individual contractors, actual construction costs may be different. Furthermore, individual tenants may elect to defer or phase certain nonessential repairs that were recommended above or, on the other hand, may elect to install more expensive materials than were assumed in estimates.

Costs for testing and abatement of lead paint and asbestos are not included in these estimates.

I. General Assumptions and Limiting Conditions

This inspection is not a certification of the soundness of a building, a survey, or a legal document (for instance, a title examination), although assumptions regarding these and other matters are made.

1. The inspector will not be required to give testimony or appear in court because of having made this report, with reference to the property in question, unless arrangements have been previously made therefore.
2. Any legal description used in this report is assumed to be correct.
3. No survey of the property has been made by the inspector and no responsibility is assumed in connection with such matters.
4. No responsibility is assumed for matters of a legal nature affecting title to the property, nor is an opinion of title rendered. The title is assumed to be good and merchantable.
5. Information furnished by others is assumed to be true, correct, and reliable.
6. All mortgages, liens, encumbrances, leases and servitude have been disregarded unless so specified within the report. The property is reviewed as though under responsible ownership and competent management.
7. It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structure. No responsibility is assumed for such conditions or any engineering or testing which may be required to discover such factors. It should be understood that old post-and-beam structures often

have advanced decay and rot on the exterior sides of the posts and beams while exhibited intact, undamaged surfaces on the interior or visible sides. Destructive drilling or removal of exterior sheathing is necessary to locate this type of damage.

8. It is assumed that there is full compliance with all federal, state, and local environmental regulations and laws unless noncompliance has been stated, defined and considered in the review report.
9. It is assumed that utilization of the land and improvements is within the boundaries or property lines of the property described and that there is no encroachment or trespass.

J. Bibliography

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"The Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings". Washington, D.C.: National Park Service, Cultural Resources, Preservation Assistance Division, 1992.

Figure 1

Figure 2

Figure 3

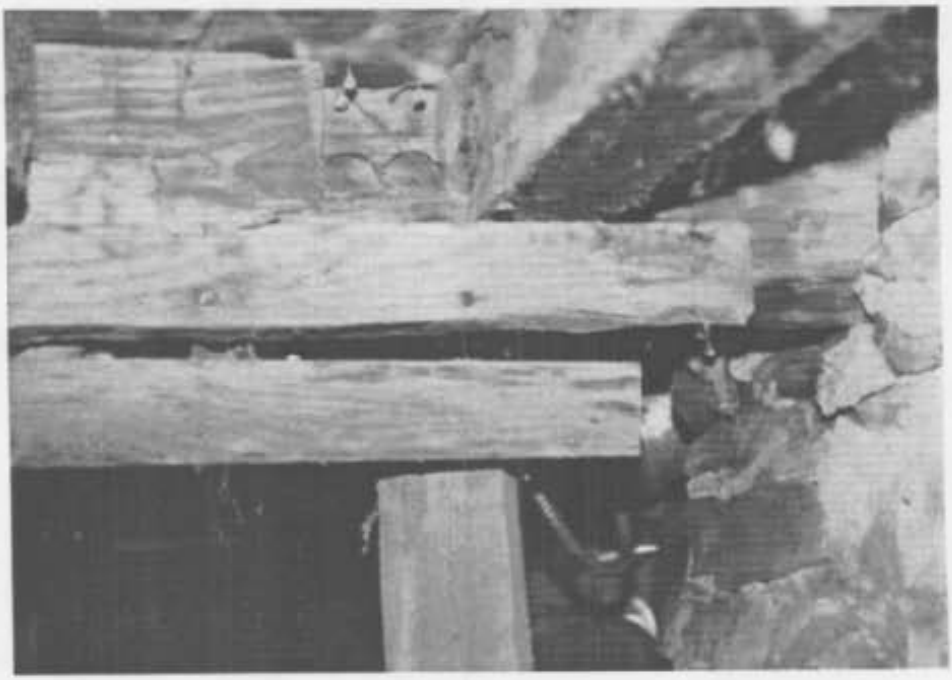

Figure 4

Figure 5

Figure 6

Figure 7

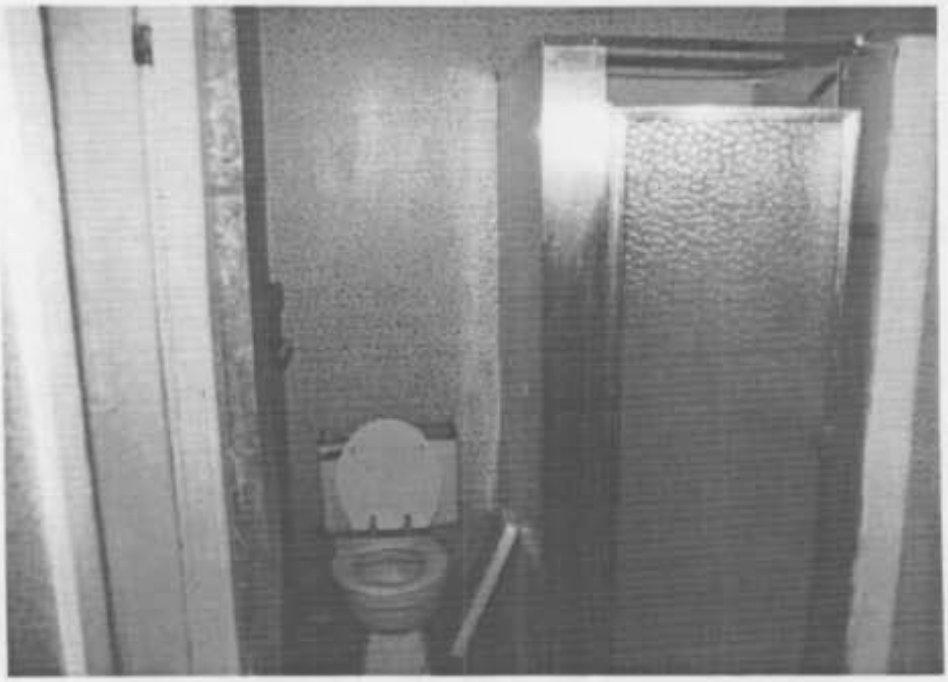

Figure 8

Figure 9

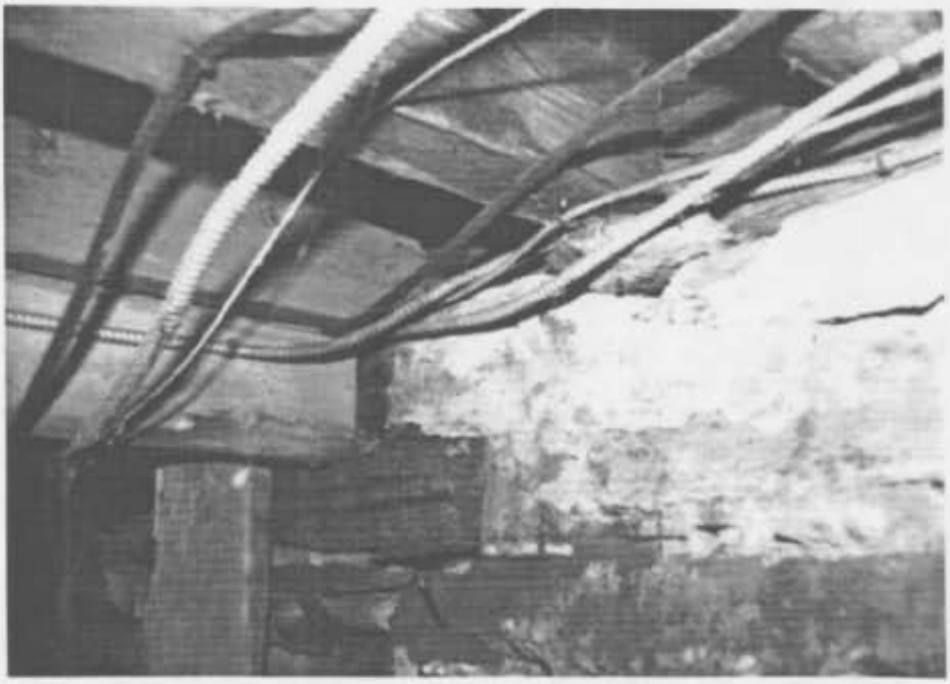

Figure 10

Figure 11

Figure 12

Figure 13

Figure 14

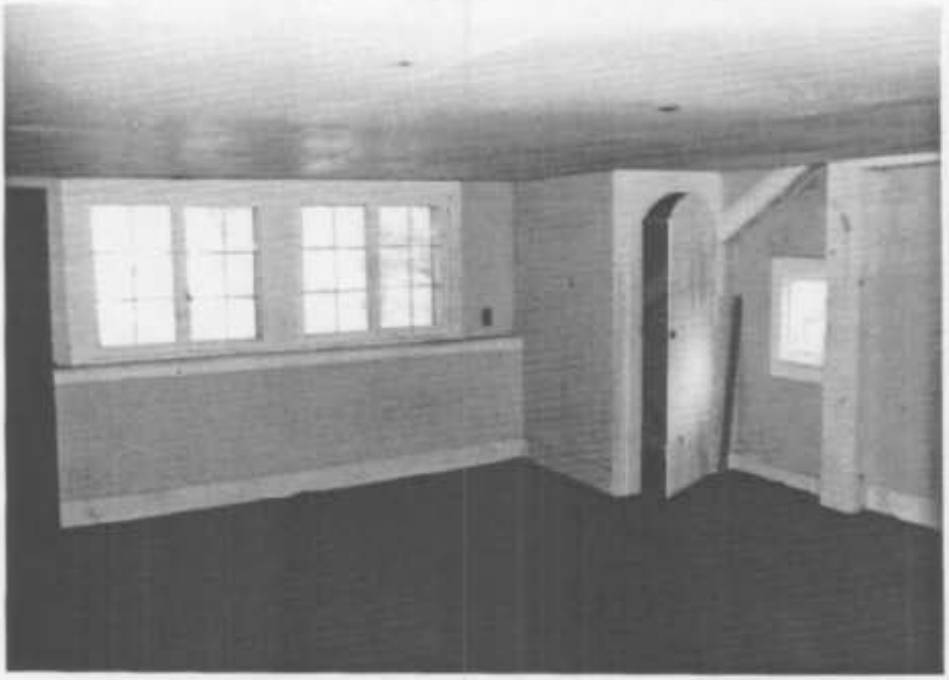

Figure 15

Figure 16

Figure 17

Figure 18

Figure 17

Figure 18

Figure 17

Figure 18

Figure 17

Figure 18

COST ESTIMATE SHEET

Division: General Requirements

Project: Superintendent's House, Beartown

Date Prepared: May 31, 1994
Checked: RAC
Sheet: WCK
Client: 2 of 9
Mass.DEM

Account	Description	Quantity	Unit	Labor & Material	Total
00700	GENERAL CONDITIONS		LS		$ 8,500
	Includes: Permits, Temporary				
	Utilities, Cutting & Patching				
	Final Cleaning & Supervision				
00800	OVERHEAD & PROFIT				$ 8,000
					$ 16,500

COST ESTIMATE SHEET

Division: Site Work & Demolition

Project: Superintendent's House, Beartown

Date Prepared: May 31, 1994
Checked: RAC
Sheet: WCK
Client: 3 of 9
Mass.DEM

Account	Description	Quantity	Unit	Labor & Material	Total
02050	Demolition		LS		$ 7,300
	(Includes fuel tank, metal chim.,				
	bsmt floor slab, lineleum,				
	homesote, plaster, gutters, etc.)				
02055	Dumpsters	4	EA	$800	3,200
02610	New Water Line to Well		LS		750
02675	Test & Chlorinate Well		LS		200
02740	New Septic System		LS		12,000
02900	Landscape Restoration		LS		1,200
					$24,650

COST ESTIMATE SHEET

Division: Masonry & Concrete

Project: Superintendent's House, Beartown

Date Prepared: May 31, 1994
Checked: RAC
Sheet: WCK
4 of 9

Client: Mass.DEM

Account	Description	Quantity	Unit	Labor & Material	Total
03300	Basement Floor Slab	12	CY	$125	$1,500
03310	New Footings for Posts		LS		400
04500	Clean & Point Found. Walls		LS		350
04540	Rebuild Chimney Above Roof	8	VLF	$60	480
					$ 2,730

COST ESTIMATE SHEET

Division: Wood & Plastic

Project: Superintendent's House, Wachusett Mt.

Date Prepared: May 3, 1994
Checked: RAC
Sheet: WCK
Client: 5 of 9
Mass.DEM

Account	Description	Quantity	Unit	Labor & Material	Total
06110	Reinf. 1st Flr Framing		LS		$2,500
06114	Replace Porch Post & Trim		LS		250
06115	New Beam, Kitchen Ceiling		LS		500
06116	Attic Vents		LS		900
06125	Gable Trim		LS		500
	(Costs have not been included for				
	replacing cabinets, counters or				
	appliances insofar as they are				
	functional - estimate replacements				
	at $7,500)				
					$4,650
	Railing				
					$19,800

COST ESTIMATE SHEET

Division: Thermal & Moisture Protection

Project: Superintendent's House, Beartown

Date Prepared: May 31, 1994
Checked: RAC
Sheet: WCK
Client: 6 of 9
Mass.DEM

Account	Description	Quantity	Unit	Labor & Material	Total
07120	Sealants		LS		$ 100
07210	Wall Insulation	2,170	SF	$1.30SF	2,821
07300	Roof Repairs		LS		750
07730	Downspouts at El	36	LF	$8/LF	288
07740	Gutters at El	40	LF	$10/LF	400
07620	Metal Flashings	100	SF	$6/SF	600
					$4,959

COST ESTIMATE SHEET

Division: Doors & Windows

Project: Superintendent's House, Beartown

Date Prepared: May 31, 1994
Checked: RAC
Sheet: WCK
7 of 9

Client: Mass.DEM

Account	Description	Quantity	Unit	Labor & Material	Total
08600	Basement Windows	4	EA	$100	$ 400
08605	Window Repairs	1	EA	$500	500
08610	Storm/Screen Door	1	EA	$200	200
08620	Misc. Repairs: Casement Windows;				
	Window Wells; Bulkhead Door.		LS		1,000
					$2,100

COST ESTIMATE SHEET

Division: Finishes

Project: Superintendent's House, Beartown

Date Prepared: May 31, 1994
Checked: RAC
Sheet: WCK
8 of 9

Client: Mass.DEM

Account	Description	Quantity	Unit	Labor & Material	Total
09200	Patch Walls & Ceilings	271	SY	$3/SY	$ 813
09210	Plaster Walls & Ceilings	165	SY	$13/SY	2,145
09250	Tape & Finish GWB Ceilings	520	SF	$.25/SF	130
09400	Replace Baseboard	100	LF	$1/LF	100
09540	Add Fireproofing @ Wood Furnace		LS		250
09560	Refinish Wood Floors	1,752	SF	$1.50SF	2,628
09580	Liquid Applied Flooring	230	SF	$3/SF	690
09910	Exterior Painting & Repairs		LS		800
09920	Paint Ceilings	1,901	SF	$.35/SF	665
09925	Paint Walls - Interior	4,528	SF	$.30/SF	1,358
09930	Paint Woodwork - Interior		LS		950
					$10,529

COST ESTIMATE SHEET

Date Prepared: May 31, 1994
Checked: RAC
Sheet: WCK
9 of 9

Division: FireProtection/Plumbing/HVAC/Electr'l

Project: Superintendent's House, Beartown

Client: Mass.DEM

Account	Description	Quantity	Unit	Labor & Material	Total
15400	Repair/Replace Domestic Hot & Cold		LS		$ 3,000
	Water Systems				
15550	Service Heating System		LS		500
15555	Replace Fuel Tank		LS		500
15560	Tape & Insulate Ducts		LS		750
16000	Check & Upgrade Electrical System		LS		2,500
					$ 7,250

Purpose of this Report

The Commonwealth of Massachusetts Department of Conservation and Recreation (DCR) is the owner and steward of the old Headquarters House, located at the southern edge of Beartown State Forest, approximately one-half mile from Route 23 in the Town of Monterey. DCR contracted with Bargmann, Hendrie + Archetype, Inc. to assess the current conditions of the building, updating a prior Report, and to prepare recommendations for preservation and for renewed use of the building. This report update is therefore intended as a tool for DCR staff and potential partners to prioritize capital needs for this historic structure and to plan for its preservation through appropriate new uses.

Executive Summary

The Beartown Headquarters (also known as "Superintendent's House") began life as a modest post-and-beam structure erected ca. 1800. Subsequent additions and alterations were made to respond to changing uses and needs. The current configuration of the house is a two-story wood-frame structure with four-room plan, central entry and stair. A one-story ell added to the east elevation in the 1930's as a CCC project is anchored by a rustic stone chimney at the east end. Concern about the preservation of this historically significant structure, coupled with the lack of adequate funding for proper upkeep of the large number of historic structures, has led the Department to pursue public-private partnerships such as the Historic Curatorship Program. DCR is interested in leasing the Beartown Headquarters House for use as a single-family residence or possibly an office for a non-profit organization.

Toward that end, Bargmann, Hendrie + Archetype, Inc. and its consultant team reviewed the prior report, visited the site and assessed the existing conditions of the building, considering various limiting conditions and code issues, and made recommendations for reuse of the building. Considering the relatively remote location of the house, its setting within the State Forest, the small size of the various rooms and interconnecting doorways and the expensive and intrusive nature of the work required to convert a residential building into a fully-compliant bed-and-breakfast or commercial office space, it is our recommendation to preserve and rehabilitate the building as a single-family residence. Required rehabilitation work includes remedial measures to arrest water damage, stabilize and reinforce the structure and provide a weather-tight building envelope, plus a comprehensive upgrade of building systems.

Table of Contents

1. General Description

Context

Beartown State Forest was created in 1921 and currently comprises over 10,800 acres of forest land, mountains and Benedict Pond. Recreational use of Beartown State Forest includes scenic hiking, swimming, non-motorized boating, picnicking, fishing and access to the Appalachian trail. During the winter months, the forest is also used for cross-country skiing, snowshoeing and snowmobiling. Hunting is also permitted.

The Headquarters House and approximately 75% of Beartown State Forest lie within the boundaries of Monterey, Massachusetts.

Locus Map

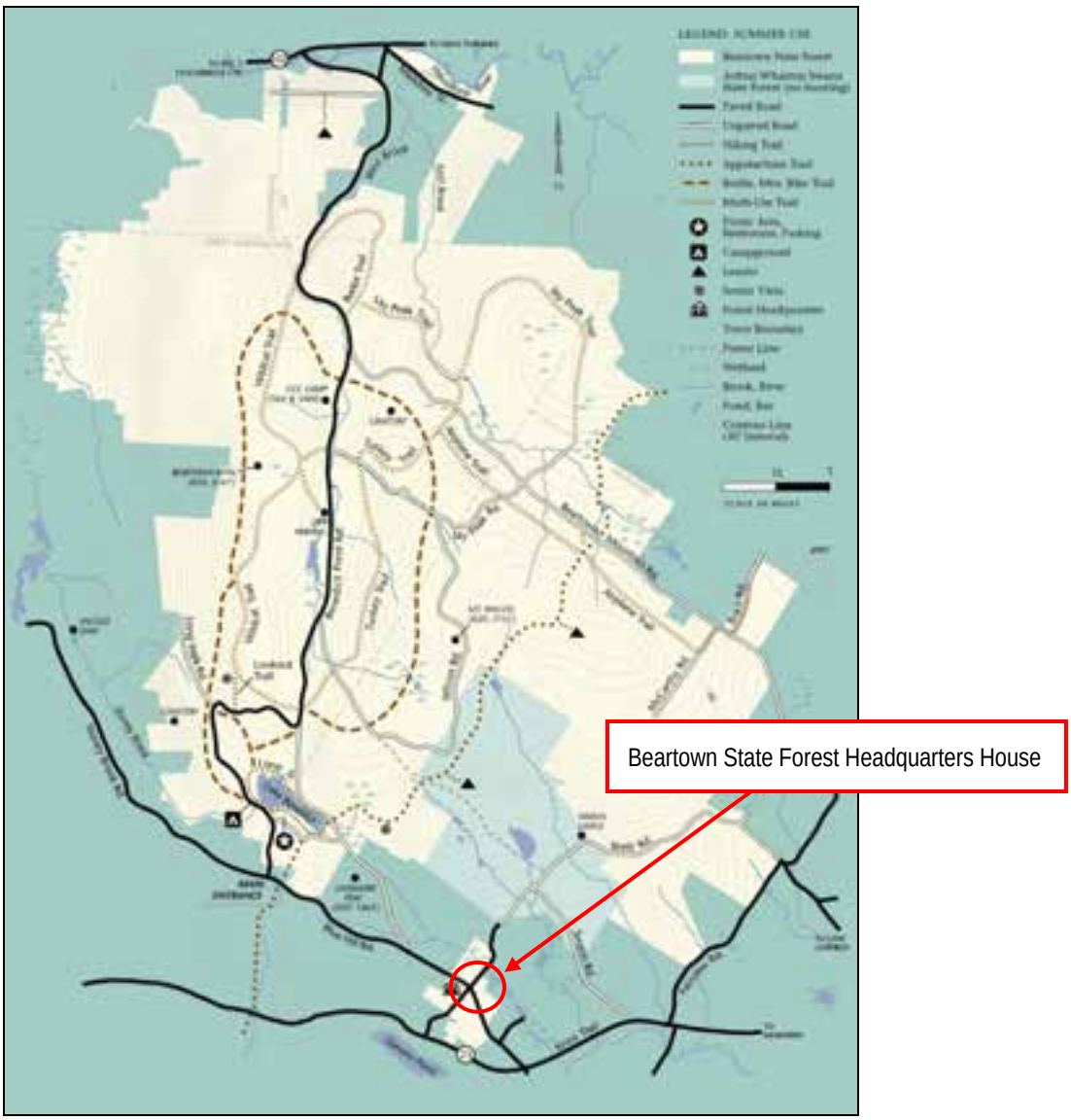

Fig. 1.1. Locus Map. Source: State Forest visitor brochure (summer trails).

Site Access

Vehicular
The Headquarters House is located at the intersection of Blue Hill and Brett Roads, approximately one-half mile from Route 23. A network of paved and unpaved park and loop roads traverse the forest.

Pedestrian
A network of trails serves visitors and connects park and loop roads; trailheads occur at roadways.

Accessible parking serving the Headquarters House could be accommodated adjacent to the building. Regrading and the construction of one or more wheelchair ramps would be required to provide access to the interior of the house.

Fig. 1.2. View of property from across intersection. Parking areas are best located to the left, away from the intersection and the stone retaining wall.

Soils

Because of the age of the building and the likely presence of lead paint, soil at building perimeters may contain lead. If the Headquarters House is offered for use as a residence pursuant to the State Historic Curatorship program, the presence of a child under 6 years old would trigger the need for a full Lead Inspection and Risk Assessment Report.

Site Features

The property contains extant plant materials and structural landscape features (e.g., stone walls and steps) significant to the evolution of the agricultural and forest landscape surrounding the Headquarters. As such, these features should be preserved and maintained to the maximum extent possible.

Fig. 1.3. View from Blue Hill Road; note stone steps and retaining wall.

Fig. 1.4. Yard south of house.

Site Drainage

Site drainage must be reconfigured in the immediate area around the house, in order to protect the framing and wood cladding from further damage (Fig. 1.5).

Fig. 1.5. Landscaping and "mulched-up" grade adjacent to house. As part of a coordinated effort to re-route roof drainage, the grounds should be regraded to pitch away from the building.

2. Description and Condition of Civil / Site Utilities

EXECUTIVE SUMMARY

The Headquarters House is serviced by an off-site water supply well that is shared with the Headquarters Garage and a private subsurface sewage disposal ("septic") system located on the House property. The House is not serviced by any apparent storm water drainage system. The well and septic system both appear to be in a condition suitable for continued use.

OBSERVATIONS: CIVIL / SITE UTILITIES

Existing Conditions	
Water	Shared Well
Sanitary	On-Site "Septic" System
Storm	None Observed

Existing Water Service: Well

The Headquarters House is serviced by a well that is located adjacent to the Headquarters Garage building, diagonally across the intersection of Blue Hill and Brett Roads. In addition to the House, the well also services the Garage building bathroom and an outside spigot on the Garage building; refer to Figure C-1 for the well location. According to Massachusetts Department of Environmental Protection (DEP) records, the 8 inch well is drilled into bedrock to a depth of 182 feet and is equipped with a ½ horse power submersible well that supplies a hydropneumatic tank located in the Garage bathroom. According to State Forest Supervisor Gordon Hamm, the House is then supplied by a "plastic" water supply line (assumed to be polyethylene tubing) that is teed off the water line in the Garage building bathroom. It then runs from the Garage building under Blue Hill Road to the east and then under Brett Road to the House property. A shut-off valve in the Garage building bathroom controls the flow to the House. Mr. Hamm does not believe that any additional shut off valves exist on the water supply line or in the house. He reports that the well yields a flow of 5 GPM and has supplied a sufficient quantity for the House and Garage building, since the well was re-drilled to a greater depth and a new casing installed to mitigate a sediment problem. The well currently supplies an average of 44 gallons per day, or 15,955 gallons per year, according to DEP records. Mr. Hamm indicated that a sediment filtration system exists in the Garage. The water is regularly tested and is reportedly of good quality. This was confirmed by DEP records; with the only exception being a single positive test for Total Coliform bacteria in 2004. All tests since have been free of Coliform bacteria. Nitrate and sodium levels have all been very low -- below State standards and guidelines. Nitrite has not been detected in any samples.

The well is classified by the DEP as a "Transient Non-Community Public Water System," with a registration number of 1193015-01G, due to the number of people potentially serviced by the well. The well has a Zone 1 radius of 100 feet and an Interim Well Head Protection (IWPA) radius of 401 feet. The disposal systems for the House and Garage lie within the Zone 1 and/or IWPA radius; along with the parking area for the Garage. The State regulations restrict certain uses such as these within a Zone 1 and an IWPA; but the existing uses are considered "grandfathered" until the well is modified, expanded or replaced; at which time the DEP may require that the facility comply with Zone 1 requirements. The DEP has required in the past that certain "bulk trash items" be removed from this Zone 1 area. Due to the presence of the disposal systems, the well is considered to have a "high" microbial susceptibility "ranking." Other activities and systems, such as heating oil tanks, also lie within the IWPA radius, so the well also has a "high" non-microbial ranking. However, these rankings do not imply poor water quality. Actual water quality is best reflected by the results of the regular specific testing of the well.

Existing Sanitary Service

The Headquarters House is serviced by a private subsurface sewage disposal system that is located on the property to the southeast of the House. This system is separate from the one that services the Garage building. Refer to Drawing C-1 in the Appendix for the system location. According to records on file with the Monterey Board of Health (BOH), the system received a Title 5 - Disposal Works Construction Permit in 1983. The completed system received a Certificate of Compliance in 1983; this permit is still valid as long as the residential "use" of the House does not change, or the building is not expanded to increase the number of bedrooms.

The design plan for this system indicates a 1,000 gallon septic tank and four 45-foot long trenches that are 2 feet deep and 3 feet wide. Soil test pits performed in the system location indicted the presence of sandy, glacial till soil to a depth of 10 feet, with no groundwater observed, and a percolation rate of 15 minutes per inch. These trenches, with the reported soil conditions, would have a capacity of 705 gallons per day (GPD) under the current Title 5 code. The House reportedly contains three bedrooms resulting in a design flow of 330 GPD; below the theoretical system capacity (well below capacity, if a garbage grinder does not exist). The current Title 5 code does require a minimum septic tank size of 1,500 gallons. However, the existing 1,000 gallon tank is "grandfathered" until the use or design flow of the House changes or the system fails, triggering an upgrade.

A septic system inspection was not performed as part of this investigation. However, with the capacity and soil and groundwater conditions reported, the system should still be in satisfactory condition, assuming proper usage and maintenance. BOH records indicate that the septic tank was regularly pumped as a preventive measure as recently as November, 2003. The tank was reported to be in "good shape" on those occasions. Secondly, Supervisor Hamm has confirmed that the system is in an acceptable, functional, condition. Observation of the area surrounding the system did not indicate any signs of failure; although the system reportedly has not been utilized for "several years."

Lastly, earlier documentation (the 1996 RFP) indicated that a second "tank" was also servicing the House. The design plan for the existing system indicates that older systems were to be abandoned and the associated piping redirected to the new system. Mr. Hamm is also not aware of any other system servicing the House.

Existing Storm Drain Service

The Headquarters House does not appear to be connected to any storm drainage system(s). The House is not fitted with any gutters or downspouts. Roof runoff sheet flows off the roof areas and appears to discharge directly onto the surrounding ground or into window-well areas. Reportedly, a substantial quantity of this runoff flows through foundation openings into the basement of the House.

CONCLUSIONS & RECOMMENDATIONS: CIVIL / SITE UTILITIES

The existing water supply and sewage disposal systems servicing the House appear to be in a condition suitable for continued use. Replacement of these systems does not appear to be warranted. However, the following recommendations are noted:

Water Service

1. The well water quality should continue to be tested on a regular basis to ensure compliance with State drinking water standards.
2. Operation and maintenance measures at the Garage and House should continue to proceed in a manner that will ensure that contamination of the groundwater supplying the well does not occur.

Sanitary Service

1. A voluntary, comprehensive Title 5 system inspection, including hand excavation of key components, could occur prior to occupancy of the House to identify any potential issues with the system.
2. Regular preventative pumping of the septic tank should recommence if the House is reoccupied.

Storm Drain Service

1. The House could be fitted with gutters and downspouts with extensions in critical areas to direct roof runoff away from the House foundation.

REFERENCES

1. 310 CMR 15.000, The State Environmental Code, Title 5, current edition effective April 21, 2006.

3. Description and Condition of Structural Systems

Introduction

On June 6, 2007, Structures-North visited the Beartown Headquarters House to review the existing structural condition of the building, with the intent of comparing to and updating the 1994 assessment. The narrative below is a summary of our findings and recommendations.

For the purposes of this report, Blue Hill Road is assumed to run east-west and Brett Road is assumed to run north-south. The front entry facing Brett Road shall be considered "west". Text shown in the standard formatting of this paragraph is new to this report and assessment, while text shown indented and in `courier` is excerpted from the 1994, for brevity and reference.

Executive Summary

The structural assessment included a thorough investigation of the structure, which was surveyed for overall capacities and deficiencies. The overall condition and performance of the structure of the Beartown Headquarters House was found to be relatively good; however, certain repairs are necessary to guarantee the lifespan of the building. An in-house structural analysis of the floor capacities was also performed; our findings are delineated in the sections below.

General Description

The general description of the house is described thoroughly in the 1994 report and repeated here:

> The Superintendent's House is an el-shaped, one and one-half story building constructed on a level site. The oldest area, a post-and-beam structure built about 1800, includes a full basement with a concrete floor and mortared fieldstone walls; a 7'-7" foot high first floor with a kitchen and three large rooms; and a 6'-3" foot high second floor with four bedrooms and one bathroom. Shed dormers were added to the roof in modern times to improve the headroom in the bedrooms. The attic is low and unusable under the remaining upper area of the original roof.
>
> The newest area is a one-story wing, forming the el, that was built during the 1930's depression at the direction of the first park superintendent. Also built as a post-and-beam structure, it is over an inaccessible crawl space and consists of one room with a large rustic, stone fireplace at its east wall.
>
> Because the eave of the wing is lower than the eave of the older part of the house, a section of the original wall "fabric" is encapsulated inside the attic of the wing (Figure 2). Instead of stud wall framing, the wall structure consists of two-inch thick vertical planks attached to the outside of the timber frame. Thick, unpainted seven-inch wide weatherboards are shaved along their upper, lapping edge, leaving a five-inch exposure. The inside surface of this wall is sheathed with horizontal boards and finished with wallpaper. A simple trim board and tilted eave soffit complete the wall construction. The planked wall is fairly common in houses built shortly after the Revolutionary War in the western areas of Massachusetts, New Hampshire and Vermont.

Unusual, however, is the combination of the vertical plank construction with traditional post construction. According to Jan Lewandowski, an intellectual traditional framer who works in Vermont,

> "The planks took the place of posts, studs, braces and sheathing and formed a single plane wall surface anywhere from 1-1/2 to 4 inches thick. Planks applied to complete timber frames (or ones lacking diagonal braces and minor studs) were known in seventeenth century New England."

The interior of the house is characterized by exposed timbers and purlins and plank wall paneling on the second floor. The construction of the oldest part of the house appears to be a combination of contemporary and archaic techniques.

Roof. The original roof framing, visible in the attic, consists of hand hewn rafters five by four inch notched, lapped and pegged together at the ridge; there is no ridge beam. They have been cut off where they intersect the plane of the ceiling below. It appears that the original timber wall plate was also removed to accommodate the shed dormers and this timber was then used as a beam to carry the cut off ends of the rafter. Found just above the ceiling, these "beams" are supported on four posts located in the hall at the stairs. **

The weight of the new and old upper portions of the roof is carried on a jerry-rigged beam and post system, as discussed above. Three of the four posts appear to sit over first floor walls; the fourth post, above the kitchen, simply sits on the floor where a noticeable sag has occurred. **

The roof framing of the addition consists of 2x4 rafters at 24 inch centers with alternating collar ties. A separate joist system supports the ceiling.

Floors. Although the second floor ceilings were finished, two heavy timber beams framing from the front to back across the width of the house were visible on either side of the original chimney area. Purlins were also visible through the ceiling of the northwest room. This framing was in good condition but with the usual sagging associated with early post-and-beam construction.

The first floor framing, visible in the basement, has been modified many times throughout the house's history. Similar to the second floor framing, two heavy timbers (6x8 and 8x8) span the width of the house on either side of the chimney mass. Intermediate framing ranges from apparently original half-log purlins to modern 2x10 joists. A variety of wood and steel posts are arranged throughout the basement. The framing has been modified to accommodate in an expedient manner whatever first floor improvements were made or to reinforce decayed elements.

Foundation and Sills: The basement walls are mortared fieldstone in generally good condition.

** Note: The 1994 report concludes that during construction of the dormers, the wall plate was removed from its original location and placed beneath the cut-off rafters, then supported by posts in 4 interior locations and at the exterior walls. Given the age of the posts relative to the more modern dormers, and the fact that the plate and "purlin" appear to exist simultaneously at the south-east corner of the house where the original construction has not been disturbed, we believe that the "purlin" is original to the construction of the house. Its purpose would surely have been to support the long-span (13') rafters at their mid-point.

If the original wall plate is typically set back from the inside face of the posts as in the SE corner, it is possible that it remains behind the wall finishes where the dormers were installed.

Floor Loading Capacity Evaluation

Historically, the structure supported residential loads. The proposed uses of the building are residential, with the possibility for an alternative office/business use. Because the primary use of the house has been residential, areas that have historically performed well are exempt from complying with code-prescribed loads. However, changing the use of the building to an office / business use obligates compliance with code-prescribed live loads, 60 psf in this case. We performed a rough check of the strength of the framing and have found it to be deficient for the code-prescribed live load; however, the Code allows for lower capacities, provided the total equivalent number of occupants is calculated and posted in full view. Assuming this, and with minimal repairs, it is our opinion that the floor can safely carry an equivalent capacity of approximately 15 occupants per room. Should the building be used for to carry substantial additional dead loads such as multiple file cabinets or retail furniture, reinforcement of the framing would very likely be required.

The following section describes the repairs necessary to achieve the live load capacities as described above as well as roof and lateral load capacities of the structure.

Noted Conditions and Recommendations

The following conditions were noted, each item is precluded by the 1994 description (if applicable) and is accompanied by our *recommendation* and a degree of urgency in which work should be completed. See end of chapter for Key.

Roof Structure -

R1 The rafter pairs adjacent to the chimney have deteriorated due to repeated exposure to moisture, and thus have dropped. *New rafters should be sistered to the existing.*

R2 From the 1994 report:

> [The rafters above the shed dormers] are only adequate to carry 24 psf or 16 psf less than the 40 psf snow load required by the Building Code. However, there does not appear to be the sagging one associates with undersized rafters; the dormer roofs vibrated considerably, though, when jumped on. *Insofar as the undersized roof rafters have adequately supported the roof for an extended period of time, do not reinforce the rafters.*

2007 Update: We concur with the 1994 observations and recommendations.

R3 There is a dip at the east side of the roof at the north end of the dormer. It is likely that the rafter upon which the shed dormer wall was built is either undersized or has been damaged by deterioration. *This area should be exposed and the rafter reinforced via sistering or replacement.*

R4 The portion of the brick chimney above the roof has significant vertical cracks and appears to be “unraveling” to the point of brick loss. *The masonry in poor condition should be dismantled and rebuilt in like kind using a mortar similar to the original bedding mortar and sympathetic to the properties of the brick units.*

Second Floor Structure -

S1 In a number of areas, we observed sawdust adjacent to holes in the wood framing. It is our suspicion that the offending cause is carpenter ants. *A pest expert or exterminator should be consulted to verify the exact cause and make recommendations. Immediate treatment may be applied using boric acid, a non-toxic and often effective repellent against many pests including carpenter ants.*

S2 From the 1994 report:

> The weight of the new and old upper portions of the roof is carried on a jerry-rigged beam and post system. Three of the four posts appear to sit over first floor walls; the fourth post, above the kitchen, simply sits on the floor where a noticeable sag has occurred. *Extend the kitchen bearing wall or introduce a beam in the kitchen ceiling to support the post above that is carrying roof load.*

2007 Update: We observed that the four posts supporting the roof sit on the chimney girts located on either side of the former central fireplace and chimney. At the front / west of the house, the chimney girts are supported by partition walls, while at rear / east of the house, the chimney girts span clear approximately 12' over the kitchen. It is our observation that the severe dip in the 2nd floor is due to deflection of the chimney girts spanning under the weight of the posts. *We recommend that either a) posts beneath the 2 girts are introduced to reduce their span or b) the soffit of the beam is exposed and sistered on each side with engineered lumber or steel.*

S3 From the 1994 report:

> Purlins were also visible through the ceiling of the northwest room. This framing was in good condition but with the usual sagging associated with early post-and-beam construction.

2007 Update: We concur with the 1994 observations and recommendations.

First Floor Structure -

F1 From the 1994 report:

> Some of the wood posts are rotted on their bottoms from sitting on the damp floor. The first floor at the west entrance sags three inches in four feet; the floors at the south side sag on inch in four feet toward the partition. *The first floor framing should be selectively removed and replaced with properly designed beams, posts and footings to carry the loads required by the State Building Code. Sound, intermediate framing may remain but should be reinforced to carry the required loads.*

2007 Update: We concur with the 1994 observations and recommendations, *and further recommend that all framing to remain be treated with boric acid.*

F2 From the 1994 report:

> Small stone-lined window wells occur at the basement windows. As catchments for leaves and water the windows frames are in poor condition. Most of these windows are presently protected with shingled hutches. *Replace the basement windows and clean out the window wells.*

2007 Update: We concur with the 1994 observations and recommendations, *and further recommend that all framing to remain be treated with boric acid.*

F3 We noted that the framing is especially deteriorated under the laundry/bath room, in addition, the basement floor beneath was silty and wet and appears to be repeatedly and aggressively soaked by water. It is likely that the blocked window opening is allowing water infiltration charged by the downspout above the window well serving the gutter over the rear porch. *See other portions of the report for recommendations on precipitation management.*

F4 There is a small area of the first floor framing that has deteriorated in the addition due to a roof leak above. *Damaged joists should be sistered as necessary.*

Perimeter Walls, Sills and Foundations -

W1 It appears that most of the sill have deteriorated to the point of intervention. *The extent of sill replacement should be verified by exposure; however, it is probable that an 80% replacement will be necessary, and should include replacement in like kind using naturally rot-resistant white oak timbers. The joinery of existing beams, joists, posts and studs shall be matched or similarly replicated during replacement.*

W2 From the 1994 report:

> There is some dampness due to weeping of water through the stones for about four to five feet above the floor.

2007 Update: It seems that the major cause of dampness in the basement is from leaking gutters via the bulkhead. *Sources of water infiltration should be systematically identified and addressed; a dehumidification system should be installed.*

Summary of Conditions by Location

Degrees of Urgency:

1 = Immediate threat to (public) safety and/or stability of the structure.
2 = Possible or eventual threat to (public) safety and/or stability of the structure (level 1) if not investigated and corrected soon.
3 = Will worsen to level 2 or cause other problems if not investigated and corrected.
4 = Will eventually worsen and increase in severity if not investigated and corrected.
5 = Would be a good improvement to make, eventually.

Roof:

		Urgency
R1	Repair deteriorated rafters	2
R2	No repair required	N/A
R3	Reinforce undersized / deteriorated rafter	2
R4	Dismantle and rebuild chimney	1-2

Second Floor:

		Urgency
S1	Confirm activity of pests with consultant, boric acid treat	1-2
S2	Resupport existing deflected beams beneath posts via new posts down or beam sisters	2
S3	No repair required	N/A

First Floor:

		Urgency
F1	Replace / augment deteriorated and undersized framing, boric acid treat framing to remain	2
F2	See architectural section	N/A
F3	See architectural section	N/A
F4	Sister damaged joists	2

Perimeter Walls, Sills and Foundations:

		Urgency
W1	Replace deteriorated sills	2
W2	See architectural section	N/A

4. Description and Condition of Mechanical, Electrical, Plumbing and Fire Protection Systems

OVERVIEW

B|E|R visited the site on June 19, 2007 to review the existing condition of the mechanical and electrical systems. Based on the fact that the Headquarters House building has not been occupied since 1997, the systems are now all in poor to failed condition, overall, although power to the building remains operable. The building's current, interim function appears to be storage of various materials and equipment.

MECHANICAL

The mechanical systems are generally old, have apparently been unused for nearly ten years and remain in poor- to failed condition. An oil-fired Air Ease hot-air furnace (Fig. 4.2) with associated 275-gallon oil storage tank (Fig. 4.5) and trim is situated in the basement; the equipment would require complete review by a certified technician to make it operable again. The associated supply and return ductwork is in poor condition due to basement atmosphere (damp, mold, dust and insulation; see Fig. 4.1). The associated flue to the existing chimney does not appear to be code-compliant; chimney lining, sleeve penetration and flue replacement would be required in order to bring the existing system into compliance.

Fig. 4.1. Typical condition, basement ceiling (first-floor framing).

Fig. 4.2. Furnace.

Duct supply and return distribution is haphazard throughout the building. Floor registers vary in size. Heat supply grilles were not found in the former Superintendent's office, in the ell.

There is a wood-burning stove with associated double-wall metal chimney; its exact condition was not determined. If the stove remains in service, the flue penetrations should be reviewed closely for fire rating clearances.

ELECTRICAL

The electrical overhead service is derived from a utility pole on Blue Hill Road (Fig. 4.3). A service meter is located on the exterior of the building. The main service disconnect, sized at 100 amps, is located within a panelboard at the basement level (Fig. 4.4.). There is a 30-amp disconnect adjacent to the panelboard that serves the electric water heater. Branch circuit wiring consisted of non-metallic sheathed cable and BX armored cable. Minimal light fixtures are powered at this time.

Fig. 4.3. Existing utility pole.

Fig. 4.4. Main distribution panel.

Receptacles and light switches vary in location, quantity and quality throughout the building. The overall system is in poor condition and would require complete upgrade to meet current code as part of any building renovation project.

FIRE ALARM SYSTEM

No integrated system exists at this time. A single (inoperable) battery smoke detector was located at the top of the stairs, at the second-floor level.

FIRE SUPPRESSION SYSTEM

There is no fire suppression system in the building. One fire extinguisher was located sitting on the floor of the ell, near the fireplace.

PLUMBING

A 1" copper service, fed from the existing Forest Headquarters building across the street, enters the basement. At this time, the water service is disconnected from the 3/4" to 1/2" building service. The water distribution is copper.

An electric, 50-gallon, 4,500 kW, 240-volt water heater is located in the basement.

All sanitary waste and vent is ABS plastic in the basement. A 3" main exits the rear of the basement to an on-site septic system. The site utility drawing shows two services out the rear.

All storm water currently sheds off the roof to grade.

No gas systems are present.

At this time, the entire plumbing system is inoperable. The overall condition of the piping, connections and fixtures remains poor, if not failed, due to age and lack of use.


Fig. 4.5. Existing 275-gallon oil tank.


Fig. 4.6. Second-floor bathroom fixtures.

CONCLUSIONS AND RECOMMENDATIONS

HVAC

1. Provide a new oil tank and oil-fired boiler with baseboard distribution, 150,000-btu boiler, hot-water pumps, piping, valves and individual baseboard.
2. Provide ceiling-mounted toilet exhaust fan with ductwork to exterior vent cap, for each toilet room.

Business Occupancy Heating/Cooling Option:
For commercial use, provide a new oil tank and an oil-fired furnace with new ductwork distribution, (2) furnaces at 4 tons cooling each, 85,000 btu each, ductwork distribution to each space with diffusers.

Electrical

1. Provide a new 125 amp, 240 volt, single phase overhead service. The service conductors should terminate at an external kWh meter.
2. Provide a new panel rated at 125 amps, with (20) 20 amp circuit breakers, (1) 50A/2P circuit breaker and (1) 30A/2P circuit breaker.
3. Provide new receptacles, installed in compliance with the Massachusetts State Electric Code.
4. Upgrade interior lighting throughout, mixing incandescent and compact fluorescent fixtures, as needed.
5. Provide 2 metal halide exterior lights, mounted on poles.
6. Rewire and repair existing "period" light fixtures (allow 5 ea).
7. Emergency lighting is not required for single-family residential use.

Business Occupancy Option
If the building were converted to a business occupancy, a new 200 amp, 240 volt, single phase overhead service would be required, as follows: the service conductors would terminate at an external kWh meter; the panelboard would be rated at 200 amps with (20) 20A/1P circuit breakers, (3) 30A/2P circuit breakers and (2) 50A/2P circuit breakers. Receptacles would be installed to coordinate with likely furniture and equipment layout. Lighting would be more extensive than for residential use and would include arrays of fluorescent fixtures. Emergency lighting would be installed and located to provide a minimum illumination of 1 footcandle at all paths of egress.

Fire Alarm System

1. Provide fire alarm system consisting of interconnected 120-volt local smoke detectors with battery backup.
2. Provide carbon monoxide detectors at all floors, as required by Code.

Business Occupancy Option: Carbon monoxide detectors are not required for the Business Use Group. Fire alarm system for Business use shall be coordinated with the Monterey Fire/Building Department. Although not required by code, the local Authority Having Jurisdiction (AHJ) may require a system anyway, due to the relatively remote location of the building.

Plumbing

1. Remove all existing plumbing systems entirely.
2. Provide new water, waste and vent piping throughout to serve new fixtures; pipe sizing will vary.
3. Provide water to mechanical systems as necessary.

Fire Suppression

1. A fire suppression system is not required for single-family residential use.

Business Use Option: A fire suppression system may be required by the Monterey Authorities, due to the remote location. If the Department decides that suppression is desirable and/or should be a requirement for the lessee, an NFPA 13D System is recommended.

5. Description and Condition of Exterior Elements

The exterior of the house is in fair condition, overall. It appears that weather and water have taken their toll on roofing and paint finishes since the 1994 report was written. Minor pest-related problems (i.e., holes) were also observed.

Roofing and Flashing

The asphalt shingles are in fair condition, with several areas evidencing biological growth. A number of areas of shingling are worn or broken. As the 1994 report noted, the raking cornices (i.e., gable ends) are poorly detailed, such that the dimensional wood sheathing is exposed at its vulnerable end-grain (Fig. 5.3). Replacement of the roof system is recommended; preparation of the roof "substrate" should include installation of ice-and-water barrier at the ridges, valleys and perimeter (i.e., at eave and raking cornices).

Fig. 5.1. Roof adjacent to east dormer.

Fig. 5.2. Condition of shingles at ell.

Fig. 5.3. Existing valleys and stepped flashing.

In conjunction with the re-roofing effort, the stepped flashing identified in the prior report (Fig. 5.3) should be improved or replaced so that it properly sheds water away from the dormer assemblies. Similarly, the existing open valleys should be replaced with new valleys; new metal work should be separated from the ice-and-water barrier to allow thermal expansion to occur without self-destruction of the assembly.

Fig. 5.4 Rotted gutter section.

Where they exist at all, existing gutters are in poor condition (Fig. 5.4). Uncontrolled roof drainage has become a major problem, as much of the roof drainage water channeled via the valleys east of the house has been funneled directly into the basement, via the unprotected areaways. This condition has further deteriorated the basement floor and created a high-humidity environment promoting rot, mold-growth and pest-infestation (Fig. 5.5). Consequently, a high-priority should be placed on reconstruction of the roof drainage system, together with restoration of the areaways and basement windows and regrading of the immediate area to direct runoff away from the house.

It should go without saying that the original roofing materials (hidden beneath the over-framed dormers, added later) must be preserved.

Fig. 5.5. Extreme humidity in basement aggravated by uncontrolled roof runoff is deteriorating structural framing and HVAC equipment.

Walls and Siding

Various finish-carpentry repairs are needed throughout the exterior of the house, including replacement of deteriorated siding and trim. The siding and trim does not appear to have been painted since just before the 1994 report was written, and the paint finishes are in poor condition. Where the paint film has peeled off completely, leaving bare wood exposed to UV degradation, the wood grain should be consolidated by light sanding and application of spar varnish, prior to priming and painting.

Fig. 5.6. Typical condition at clapboard siding, 2007.

We concur with the 1994 report in recommending gable-end attic vents, in order to create a ventilated "cold" attic as well as to allow summer ventilation. Gable-end louvers are recommended here because the over-framed shed dormers would make installation of the visually-preferable continuous ridge vent difficult and intrusive.

Windows

Although all windows were reportedly restored and painted by the time of the 1994 report, they have suffered typical weathering and moisture-related deterioration. In addition, windows in the ell have pest-related damage (i.e., rodents trying to escape, Fig. 5.7).

Fig. 5.7. Ell window; note damage to stool and sash.

Chimneys

The rustic stone chimney located at the east end of the ell requires spot-repointing in several areas. In addition, the gaps between the chimney and the adjacent wood-framed walls must be filled with insulation, backer and sealant, where possible.

Fig. 5.8. Ell chimney.

Fig. 5.9. Stone masonry needs spot-repointing.

The brick chimney (reconstructed as a heating system-flue at some point) is in extremely poor condition above the roof and needs to rebuilt (Fig. 5.10). As part of this process, the clay-tile flue liner should be inspected and repaired. From the attic (Fig. 5.11), the masonry appears to be in fair to good condition, but should be inspected in more detail, nonetheless, to check for leaks.

Fig. 5.10. Brick (flue) chimney.

Fig. 5.11. Chimney at attic.

Doors

Historic doors should be preserved and maintained. In particular, the Italianate-style front door, with its double-arched glass lights (Fig. 5.12), and the Colonial-Revival door at the ell (Fig. 5.13) should be restored.


Fig. 5. 12. Italianate-style front door.


Fig. 5.13. Interior face of recessed-panel door at ell.

Porches

The porches were apparently added to the original house during the late-Victorian era – perhaps, in conjunction with interior modifications. Presently, the porches appear to be a mixture of original (to the porches), reproduction and modern elements. Although the pressure-treated porch decks are practical and visually benign, the existing square posts detract from the historic character of the exterior and should be replaced with appropriately detailed new posts. Then the balance of the porch assemblies should be re-roofed, repaired and repainted.

The portico over the rear door (Fig. 5.14) is in poor condition and could either be rebuilt and re-roofed, or removed, as part of a larger renovation project.


Fig. 5.14. Rear portico.

CONCLUSIONS & RECOMMENDATIONS: EXTERIOR ELEMENTS

Roofing

1. Remove existing 3-tab asphalt-shingle roofing to sheathing; provide ice-and-water barrier at valleys, ridges, eaves; provide 40-year asphalt-shingle roofing throughout, including alum. drip edges (allow 22 squares).
2. Provide backprimed wood trim at raking cornices to provide protection of edges of sheathing (allow 100 lf).
3. Provide LCC stepped flashing at roof/wall and roof/dormer intersections (allow 50 lf).
4. Remove existing open metal valleys; provide new LCC open valleys (allow 12 lf).
5. Repair/replace/extend Douglas fir gutters (allow 30 lf); provide LCC rain leaders (allow 30 lf).

Walls and Siding

1. Provide painted wood louver gable vents (2 ea).
2. Remove rotted/damaged casing and trim; provide insulation/sealant joints exposed by this work; provide new backprimed casing/trim to match (allow 250 lf).
3. Remove rotted/damaged clapboard siding; provide new pre-primed clapboard siding to match (allow 300 sf).
4. Remove rotted sill; provide new p.t. sill, including required temp. shoring (allow 40 lf).
5. Prepare and paint entire exterior (allow 2,200 sf).

Windows

1. Repair/reglaze/prep/paint all windows (29 at avg. size 7.5 sf ea).
2. Remove/reinstall storm windows (allow $1,000).
3. Repair/reglaze/replace/prep/paint basement windows (allow 10 at 4 sf ea).

Chimneys

1. Repoint stone chimney; provide sealants; repair copper stepped flashing (allow $10,000).
2. Rebuild clay-brick chimney above roof (allow 15 sf) and replace cracked clay flue tile at top.

Doors

1. Repair/reglaze/prep/paint all doors (4 ea).

Porches

1. Replace modern porch posts with traditionally detailed posts, including decorative trim (4 ea).
2. Repair/prepare/paint porches (allow $3,000).

6. Description and Condition of Interior Elements

The L-shaped floor plan incorporates the original post-and-beam house, as modified and expanded over the years, including a one-story rear ell added by the CCC during the 1930's. The ell is a large "living-room" featuring a large stone fireplace at the far end and built-in cupboards and map file drawers adjacent to the French-door entrance.

Fig. 6.1. Existing first-floor plan of Headquarters House

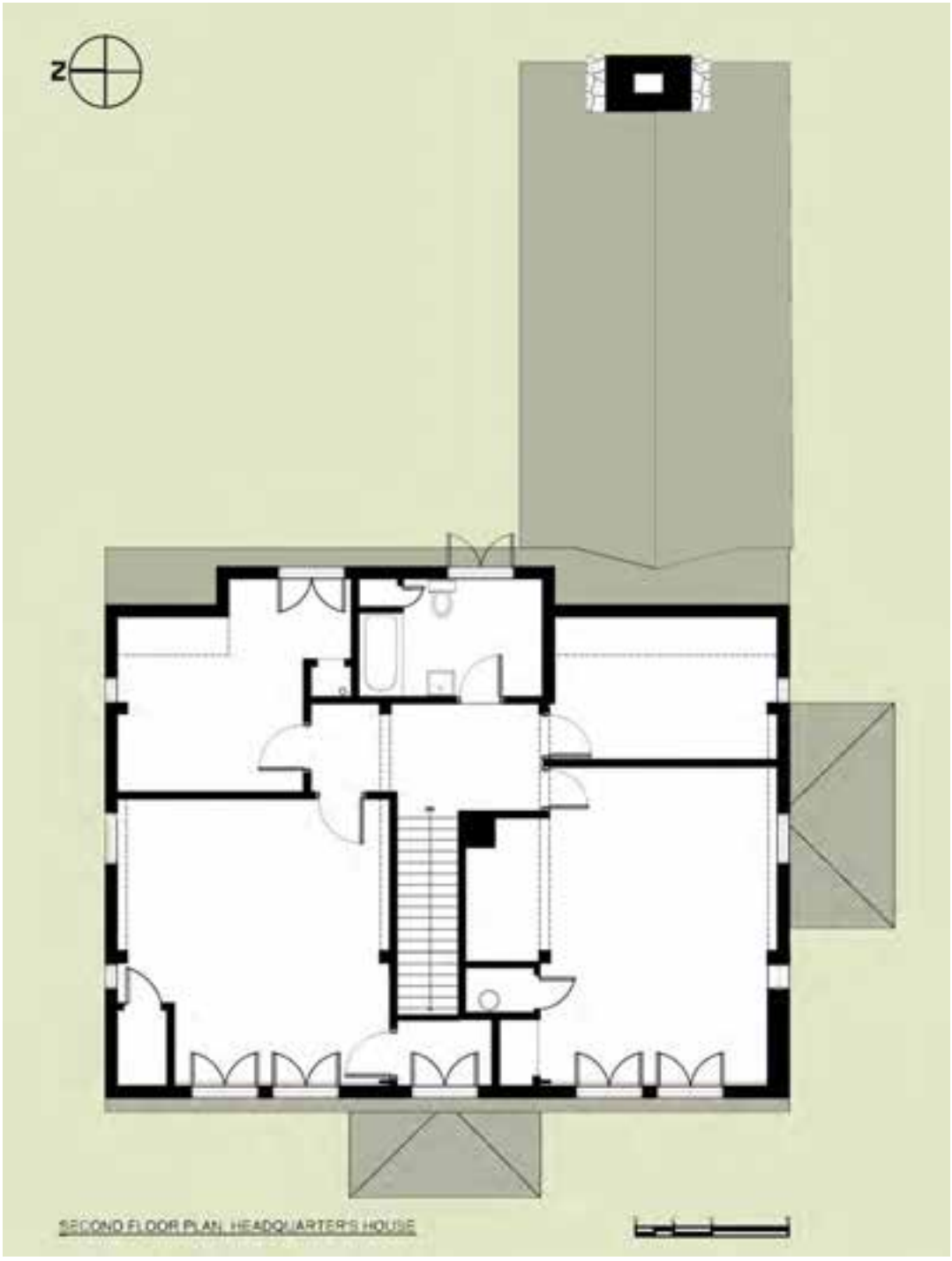

Fig. 6.2. Existing second-floor plan of Headquarters House

Floors and Flooring

The basement floor is concrete in most areas, but is in poor condition. Replacement of the slab is strongly recommended, in conjunction with replacement of basement windows, restoration of a functional roof drainage system and regrading of lawn areas to drain water away from the house.

Original flooring at the first and second floor levels survives in good condition, despite the fact that the floors pitch at an angle or sag in a number of areas, due to structural alterations made during modern times (refer to structural assessment). Extant joints and patches in the floor provide an interesting record of changes over time (Fig. 6.4), and should be documented and analyzed. The wide-board flooring must be preserved in place, and any changes or floor coverings should avoid damage to the surfaces and be easily reversible. Similarly, the hardwood flooring at the Dining Room and ell should be preserved and maintained.

Fragments of early- to mid-century linoleum and wallpaper exist in closets. If these must be removed, they should first be documented photographically, and representative samples should be submitted to DCR for archival purposes. More-recent flooring surfaces and wallpapers (e.g., the kitchen) appear to be non-contributing and can be removed.

Fig. 6.3. Linoleum flooring in closet: original location – or moved?

Fig. 6.4. Scratches on painted pine wood floor at NW parlor reveal an interesting "paint history."

Fig. 6.4. Joints in wide-board pine flooring at second floor seems to indicate prior changes to the floor plan.

Walls and Ceilings

Refer to the structural assessment and recommendations, regarding the kitchen ceiling, which concur with the 1994 Report.

A curious hole in the ell ceiling appears to be moisture-related, although a corresponding hole in the roof was not observed at the time of the visit. In any case, the hole should be patched.

Fig. 6.5. Water damage and mold at kitchen ceiling.

Fig. 6.6. Paneling and beams at Dining Room. Note apparent difference in wood species between paneling and glass-fronted cupboard.

The Dining Room ceiling is faced with timber "beams" that are apparently decorative in nature (Fig. 6.6). Together with the V-groove pine wall paneling and built-in cabinets, the room retains its historic character and is worthy of preservation, even if required structural changes and other improvements are made to the adjacent kitchen and the wall dividing the two rooms. The cabinet along the east wall of the dining room appears to have been modified, in that the glass doors and china cabinet are of different wood species from that of the built-in plan files below them/

Trim and Finishes

Wherever possible, early finish carpentry (e.g., door and window casings, trim, dado caps, baseboards) should be retained. The living room ceiling is fiberboard with wood battens and therefore a twentieth-century improvement; it remains in surprisingly good condition.

Modern paneling in several rooms clashes with such historic details as baseboards, door and window casings and dado caps, and can be removed and discarded as part of a future renovation.

Fig. 6.7. The existing kitchen cabinets and wallpaper.

Modern wallpaper and other finishes in the kitchen (Fig. 6.7) can be removed and discarded, as part of an overall kitchen renovation.

Fireplace

The large fieldstones that comprise the fireplace demonstrate the stonemason's art and introduce a rustic quality to the house, recalling the "Great Camps" of the Adirondacks. The fireplace and its prominent chimney may represent the influence of the National Park Service in sponsoring what has been called the "Golden Age of Rustic Design" of parks and recreation structures. The fireplace appears to be in reasonably good condition, but the damper needs renewal in order to return to functionality, the stonework needs repointing, and the gap between the chimney and the east wall must be properly filled and sealed. As an important and "anchor" feature of the building and the site, the fireplace must be preserved.

Fig. 6.8. Stone fireplace in ell. Note also the wood paneling, which is in need of renewal.

Insulation

Roof insulation was observed in part but not all of the two attic spaces. It is recommended that R-39 batt insulation be added to accessible uninsulated portions of the attic, in conjunction with the introduction of gable louver vents.

The forced-air heating ductwork is not insulated; it would thus appear that the system does not heat the building as efficiently as it could. Insulation is not needed if the ductwork will be removed as part of installation of a new hydronic system.

Miscellaneous

Due to the volume of roof drainage and runoff water that has been allowed to run directly into the basement, moisture conditions were extreme during the time of the site visit, with condensed water dripping from metal and wood surfaces alike. The conditions have resulted in punky wood at some beams and joists, with the potential for compression and eventual failure.

Fig. 6.9. The sill of the house is exposed to the basement interior in only a couple of spots; therefore an accurate determination of its condition is difficult without more extensive testing and/or removal of exterior cladding.

Fig. 6.10. First floor framing evidencing mold growth.

Fig. 6.11. Hand-hewn beam and modern additions.

CONCLUSIONS & RECOMMENDATIONS: INTERIOR ELEMENTS

Floors and Flooring

1. Pour concrete slab-on-grade in basement (allow 12 cy), including thickened areas for new/existing posts.
2. Per the structural recommendations, repair/replace rotted or inadequately-sized first-floor beams (or portions

Walls and Ceilings

1. Repoint lower half of rubble stone basement walls (allow 600 sf).
2. Repair hole in ceiling at ell (allow $750).

Trim and Finishes

1. Replace mildew-damaged areas of kitchen ceiling; provide new GWB throughout, in conjunction with structural improvements (allow $4,000).
2. Replace baluster at stair balcony (allow $500).
3. Prepare and paint ell ceiling, following repairs (275 sf).
4. Prepare and re-varnish paneling at ell (allow 475 sf).
5. Prepare and re-varnish V-groove paneling at Dining Room (allow 300 sf).
6. Document extant linoleum and wallpaper prior to alteration and/or removal (allow $750).
7. Prepare and paint original wide-board flooring (allow 750 sf).

Fireplace

1. Inspect and repair metal damper.
2. Scrape and refinish steel heating grilles built into chimney (2 ea).

Insulation

1. Provide batt insulation at attic, where accessible (allow 250 sf).

Miscellaneous

1. In conjunction with other stabilization measures, provide a portable, commercial-grade dehumidifier for use in the basement (allow $1,000).

7. Building Code Issues

Applicable Codes

Codes governing the repair and or renovation of the Headquarters House at Beartown State Forest include The Massachusetts State Building Code, (780 CMR), 6th Edition, and the Massachusetts State Plumbing Code, (248 CMR). However, if single-family occupancy is maintained, the Seventh Edition of the Massachusetts State Building Code (One and Two Family Dwelling Code), 780 CMR applies to substantial renovations (i.e., work beyond maintenance and minor repairs. In this regard, it must be noted that the Commonwealth adopted the International Residential Code (part of the ICC family of codes) as of April 1, 2007; for projects being permitted between now and October, either code may be used.

Existing Use or Occupancy

Per 780 CMR 310, the Headquarters House would be classified as a Use Group R-4 Single-Family Residence. This section defines a one-family residence as a building containing one dwelling unit with no more than five lodgers or boarders. Although the small size of the upstairs makes its possible use as a full-fledged bed-and-breakfast seem unlikely, the Use Group appears to allow a host family to accommodate a number of boarders.

Construction Type

The existing building is classified as Type 5B (unprotected). Buildings of Type 5B construction are those in which the exterior walls, load-bearing walls, partitions, floors and roofs are constructed of any approved materials.

Use/Structural Limitations

The Headquarters House is a historic structure, built using techniques common at the time of its construction.

Other Uses
Converting the house to a more intensive use (such as a commercial office) would require significant structural, architectural, and mechanical modifications that would affect historic fabric and risk further altering the building's historic character. In particular, extensive reinforcement of the floor systems would be required for non-residential use. A commercial use would constitute a change in the "use and occupancy" and would trigger many of the same life-safety and egress provisions of the State Building Code required for new construction. From the preservation point-of-view, commercial occupancy is therefore not recommended.

Existing One- and Two-Family Residences

Scope
The provisions of 780 CMR 9300 govern the repair, renovation, alteration, additions, change in use and demolition of existing one- and two-family detached dwellings and accessory buildings and structures which were legally constructed under 780 CMR 51.00 through 99.00 or prior editions of the Massachusetts State Building Code or other legally adopted codes, laws, bylaws or regulations adopted by the jurisdiction and which were in effect at the time the existing building was constructed, renovated or otherwise altered.

The intent of the Code is to provide for standards of construction which serve to maintain or improve the performance of existing buildings of this type and to permit such existing buildings and components of existing buildings to remain in use without necessarily requiring compliance with the code for new construction unless expressly required otherwise.

Egress
Per 780 CMR 9300, all emergency escape windows from sleeping rooms must have a net clear opening of not less than 3.3 square feet. The minimum net clear opening must be 20 inches by 24 inches in either direction, except that windows in sleeping rooms of existing dwellings which do not conform to these requirements may be replaced without conforming to these dimensional requirements, provided that the windows do not significantly reduce the existing opening size. The existing windows appear to meet this requirements, at least marginally. Each second-floor sleeping room must have direct access to the central stair and access to a complying egress window.

Fire Safety
The entire existing building must be provided with smoke detectors, heat detector and carbon monoxide detectors designed, located and installed in accordance with the provisions for new construction, 780 CMR 5313, as applicable.

Energy
780 CMR 9307 addresses opportunities to make incremental improvements in energy conservation to the fullest extent practical during renovations of existing one- and two-family dwellings, their mechanical systems, or portions thereof. In general, these provisions are intended to enhance rather than replace existing building systems.

Historic Resources
The Headquarters House and its site are managed by DCR as a historic structure and landscape, in recognition of 130 years of agricultural and forest history. The area was first settled soon after the Revolutionary War, and divided into farms. During the 1930's, the Civilian Conservation Corps planted trees in the area, some of which are still extant. The CCC also constructed the east ell of the house, which was reportedly used as the Superintendent's Office.

780 CMR 9309 "Partially Preserved" Historic Buildings

As noted above, the Beartown Forest Headquarters House is a "historic building," further categorized as a "partially preserved building" (780 CMR 9309.1), and is subject to the following provisions: 1) individual components of an existing building system may be repaired or replaced in-kind without requiring that system to fully comply with the code for new construction; 2) when the repair of historic materials is not possible, compatible materials may be substituted which closely convey the form and design as well as the visual appearance of the structure.

"Partially preserved buildings" are subject to a number of exemptions from provisions of the Code. Repairs or in-kind replacement of such features as historic roofing, windows, entries, porches, decorative elements, metal and masonry are allowed so as not to compromise the architectural integrity of the building's significant historical characteristics and qualities. This status also exempts the building from energy requirements. For example, Section 9309.3.2 allows existing historic windows to be repaired without requiring energy-code compliance. For code purposes, an existing dwelling is not treated as a "partially preserved building" unless it is deliberately designated as such.

Per 9309.3, structural requirements for additions, and for existing buildings subject to repair, alteration and/or change of use, shall be in accordance with 780 CMR 5301 for one- and two-family dwellings (R-4 use) and otherwise in accordance with 780 CMR 3400.3(10); however, partially preserved historic buildings need not comply with the seismic load requirements of 780 CMR 3408.

State Building Code Exceptions

Repairs or in-kind replacement of the following features is allowed on partially preserved buildings so as not to compromise their historical integrity:

Roofing: Repair or in kind replacement of an existing historic roof system is permitted without requiring structural compliance for equivalent new construction, providing that dead- and live-loading requirements have not changed.
Windows: Repair or in-kind replacement of existing historic windows is permitted without requiring energy code compliance.
Entries/Porches: Repair or in-kind replacement of existing individual decorative features of an existing system is permitted.
Wood siding/Decorative elements: Repair or in-kind replacement of an existing system is permitted.
Masonry: Repair or in-kind replacement of masonry units as part of an existing system is permitted.
Metals: Repair or in-kind replacement of existing architectural metals is permitted.
Interior features: Repair or in-kind replacement of nonstructural interior features that are important in defining the overall historic character of a building is permitted.

Compliance

In certain instances, compliance alternatives are allowed. For all proposed work covered by this section, the Code requires the owner to cause the existing building to be investigated and evaluated with regard to fire safety, means of egress and general safety. The code official generally determines whether the existing building, with the proposed addition, alteration or change of occupancy, complies with the provisions of this section.

Accessibility

Most of the building entries, interior spaces, and doorways are not currently accessible, as defined by 521 CMR Massachusetts Architectural Access Board (MAAB) Regulations. Particular issues are entry steps, interior door widths and opening clearances, threshold heights and profiles, and interior vestibule and hall dimensions. While door thresholds are easily replaced, the existing layout with central stair, narrow hallways and tiny historic doorways would present a major accessibility challenge, since modifications for accessibility would need to be designed to protect the historic integrity of the structure. Widening the interior doors to meet current wheelchair width requirements would require removal of existing doors, hardware and trim and alteration of existing framing and panels. Although they do not appear to be historically significant, existing bathroom fixtures and kitchen fixtures, appliances and counters are not specifically wheelchair-accessible.

If the building remains in use as a single-family residence, accessibility improvements appear to remain discretionary, despite cross-references in the code regarding “partially preserved buildings.” If the facility were used as a bed-and-breakfast, accommodations for people with disabilities would deserve serious consideration; however, the changes required to make just the first floor accessible would require the creation of one or more exterior ramps, reconstruction of the front porch floor, removal and reconstruction of 5 or more doorways (including reversing the swing of the front door), construction of a new bathroom and possible modifications to both vestibules.

Hazardous Materials

It should be assumed that the building contains lead-based paint, in various concentrations. Paint containing greater than 0.50% total lead concentration exceeds regulatory thresholds. However, this does NOT mean that all lead paint needs to be removed prior to or during renovations. However, during any renovation of the building that might disturb the paint finishes, DCR staff and contractors must observe OSHA requirements and other Federal and State guidelines, in order to protect workers from airborne lead contamination.

When and if the building is reoccupied as a single-family residence and a child under 6 years old will reside there, Massachusetts Department of Public Health child safety laws require a comprehensive inspection to properly identify lead-paint violations inside and out and identify abatement measures required.

CODE ANALYSIS FOR PROPOSED USES

Use Group: R-4 Residential

Type of Construction: 5B Unprotected (wood frame construction)

Maximum Allowable Size of Building (Not applicable to single-family residences)

Actual Area	First Floor	1,375 sf ± (not including porches)
	Second Floor	875 sf ±
Approx. Total Area		2,250 sf

Occupant Load:	First Floor	7 (Residential Occupancy at 200 gsf/occupant)
	Second Floor	5
	Total	12

Required Number of Exits: 2
Actual Exits: 4

Required Egress Width per Occupant:	Stairway from Second Floor	0.3" x 7; OK
	Doors, Corridors	0.2" x 12; OK

8. Preservation Issues

IDENTIFYING CHARACTER-DEFINING FEATURES

The Secretary of the Interior's Standards for Rehabilitation define "character-defining features" as follows: *"architectural materials and features that are important in defining the historic character of a building are generally recommended for retention and preservation. Alteration or removal is apt to cause diminution or loss of the building's historic character. Repair, rather than replacement, of existing character-defining features is recommended."*

Character-defining features of a contributing property within a historic district are typically linked to those of the district. Evaluation criteria include craftsmanship, historic and/or architectural significance, potential for public accessibility, visual prominence and integrity of setting, design and materials.

PRESERVATION PRIORITIES

THIS SECTION SETS FORTH A CATEGORIZED LIST OF PRESERVATION PRIORITIES FOR THE BEARTOWN STATE FOREST HEADQUARTERS HOUSE :

High Priority items *must* be preserved and typically require a strict conservation/preservation approach toward repairs.

Medium Priority items are character-defining features that *should* be preserved but, if deteriorated, may be replaced in-kind with retention of character and detailing.

Low Priority items are those which possess little or no significant character-defining features. They may be preserved, altered, *or removed*, provided that such action has no physical or visual effect on High or Medium Priority items.

BEARTOWN STATE FOREST HEADQUARTERS HOUSE

High Preservation Priority:
(Must be preserved.)

- "Feeling and association" of building as 1) a residence and 2) Forest Superintendent's Residence
- Stone stairs and retaining walls at yard
- Simple gabled massing of original building and ell addition
- Stone chimney
- Original exterior door and window opening locations
- Italianate-style front door
- Existing 2/2 and 6/6 window configurations, illustrating changes over time
- Intact beveled siding and simple wood trim
- Central stair, including exposed paneling and balcony
- Original hand-hewn framing and joinery exposed at first- and second-floor levels
- Original shingle roofing assembly concealed beneath dormer over-framing.
- Exposed wood-panel partitions with vertical pine boards
- Varnished v-groove paneling at Dining Room
- Wide-board pine flooring
- Hardwood flooring, wood paneling and built-in storage at ell (to preserve CCC context)
- "Paint history"; document paint chronology if painting over

Medium Preservation Priority:
(Should be preserved; can be replaced in-kind if necessary.)

- Yard and poplar tree grouping
- Shed dormer massing
- Boxed eave cornices
- Douglas fir gutter sections
- Original and/or reproduction detailing at porches
- Casement windows at dormers, including hardware
- Intact interior wood trim and casings (including dado caps), illustrating stylistic evolution
- Knotty pine built-in storage at NE bedroom
- Sound and intact lath-and-plaster finishes, throughout
- Fiberboard ceiling with wood battens, at living room
- Early- to mid-20th-C. linoleum flooring and wallpaper
- "Period" (Colonial Revival) light fixtures

Low Preservation Priority:
(Little or no contribution; may be altered or removed.)

- "Hutches" covering basement-window areaways
- Asphalt shingle roofing and aluminum flashing
- Brick chimney
- Overhang at rear door
- Modern storm windows
- Modern storm/screen doors
- Modern alterations to porches (e.g., pressure-treated wood)
- Modern paneling and associated trim
- Modern kitchen layout, fixtures and appliances
- Modern bathroom layout, fixtures and accessories
- Heating and ventilation floor grilles

9. Conclusions and Recommendations

Based on observations of the physical conditions, consideration of potential reuse options and an understanding of the site's historical significance, there is no question that the property should be preserved and rehabilitated. Historical landscape features should also be preserved, in conjunction with the addition of such infrastructure improvements as accessible parking and walkways.

Water Service

- Test well water quality to ensure compliance with State drinking water standards.
- Protect well from contamination of the groundwater during ongoing operation and maintenance procedures at the Garage and House.

Sanitary Service

- Perform a comprehensive Title 5 system inspection, including hand-excavation of key components, prior to occupancy of the House to identify any potential issues with the system.
- Pump out septic tank on a regular basis after the House is reoccupied.

Storm Drain Service

- In conjunction with a new system of gutters and downspouts, provide extensions in critical areas, and re-grade as necessary (allow 250 SF) to direct roof runoff away from the House foundation.

Structure

- Roof Structure:
  - R1 New rafters should be sistered to the deteriorated existing rafter pairs adjacent to the chimney.
  - R3 Expose dip at east side of roof at north end of dormer; repair undersized and/or deteriorated rafter upon which dormer wall was built.
  - R4 Dismantle and rebuild in like kind masonry at chimney (above roof), using mortar similar to original bedding mortar and sympathetic to properties of brick units.
- Second Floor Structure:
  - S1 Consult pest management expert to verify source of sawdust piles -- suspected to be carpenter ants. Provide borate treatment throughout house (at all exposed framing).
  - S2a At sagging ceiling above kitchen area, introduce new posts beneath the two deflecting old chimney girts, in order to reduce their span.
  - S2b Alternatively, expose soffit of beam and sister on each side with engineered lumber or steel.
- First Floor Structure:
  - F1 At west entrance, south side and elsewhere as required, selectively remove deteriorated framing systems and replace with properly designed beams, posts and footings to carry the loads required by the State Building Code. Reinforce sound, intermediate framing as required to carry required loads.
  - F2 Clean out and repair stone-lined basement window wells. Repair/replace window frames. Treat all framing with borates.
  - F3 Replace rotted framing below laundry/bath room (in conjunction with precipitation management described elsewhere).
  - F4 At small area of first-floor framing deteriorated due to roof leak above, sister damaged joists as necessary.
- Perimeter Walls, Sills and Foundations:
  - W1 Replace rotted building sills, in like kind using naturally rot-resistant white oak timbers; allow 80% replacement. Match and/or replicate joinery of existing beams, joists, posts and studs during replacement.
  - W2 Repoint stone basement walls 100%, up to 5 feet above floor.

HVAC

- Provide new oil tank and oil-fired boiler with baseboard distribution, 150,000-btu boiler, hot-water pumps, piping, valves and individual baseboard.
- Provide ceiling-mounted toilet exhaust fan with ductwork to exterior vent cap, for each toilet room.
- Business Occupancy Heating/Cooling Option:
  For commercial use, provide new oil tank and oil-fired furnace with new ductwork distribution, (2) furnaces at 4 tons cooling each, 85,000 btu each, ductwork distribution to each space with diffusers.

Electrical

- Provide new 125-amp, 240-volt, single-phase overhead service. Service conductors should terminate at new external kWh meter.
- Provide new panel rated at 125 amps, with (20) 20-amp circuit breakers, (1) 50A/2P circuit-breaker and (1) 30A/2P circuit-breaker.
- Provide new receptacles, installed in compliance with Massachusetts State Electric Code.
- Upgrade interior lighting throughout, mixing incandescent and compact fluorescent fixtures, as needed.
- Provide 2 metal-halide exterior lights, mounted on poles.
- Rewire and repair existing "period" light fixtures (allow 5 each).
- Business Occupancy Option:
  For commercial use, provide new 200-amp, 240-volt, single-phase overhead service as follows: terminate service conductors at an external kWh meter; rate panel board at 200 amps with (20) 20A/1P circuit breakers, (3) 30A/2P circuit breakers and (2) 50A/2P circuit breakers. Provide receptacles to coordinate with likely furniture and equipment layout. Provide appropriate lighting, including arrays of fluorescent fixtures. Provide emergency lighting located to provide minimum illumination of 1 foot-candle at all paths of egress.

Fire Alarm System

- Provide fire alarm system consisting of interconnected 120-volt local smoke detectors with battery backup.
- Provide carbon monoxide detectors at all floors, as required by Code.
- Business Occupancy Option: Delete carbon monoxide monitors (not required for Business use Group). Provide fire alarm system coordinated with Town of Monterey Fire/Building Department.

Plumbing

- Remove all existing plumbing systems entirely.
- Provide new water, waste and vent piping throughout to serve new fixtures; pipe sizing will vary.
- Provide water to mechanical systems, as necessary.

Fire Suppression

- [A fire suppression system is not required for single-family residential use.]
- Business Occupancy Option:
  Assuming that a fire suppression system will be required by Town of Monterey Authorities (due to the remote location) provide NFPA 13D System, complete.

Roofing

- Remove existing 3-tab asphalt-shingle roofing to sheathing; provide ice-and-water barrier at valleys, ridges, eaves; provide 40-year asphalt-shingle roofing throughout, including alum. drip edges (allow 22 squares).
- Provide backprimed wood trim at raking cornices to provide protection of edges of sheathing (allow 100 lf).
- Provide LCC stepped flashing at roof/wall and roof/dormer intersections (allow 50 lf).
- Remove existing open metal valleys; provide new LCC open valleys (allow 12 lf).
- Repair/replace/extend Douglas fir gutters (allow 30 lf); provide LCC rain leaders (allow 30 lf).

Walls and Siding
- Provide painted wood louver gable vents (2 ea).
- Remove rotted/damaged casing and trim; provide insulation/sealant joints exposed by this work; provide new backprimed casing/trim to match (allow 250 lf).
- Remove rotted/damaged clapboard siding; provide new pre-primed clapboard siding to match (allow 300 sf).
- Prepare and paint entire exterior (allow 2,200 sf).

Windows
- Repair/reglaze/prep/paint all windows (29 at avg. size 7.5 sf ea).
- Remove/reinstall storm windows (allow $1,000).
- Repair/reglaze/replace/prep/paint basement windows (allow 10 at 4 sf ea).

Chimneys
- Repoint stone chimney; provide sealants; repair copper stepped flashing (allow $10,000).
- Rebuild clay-brick chimney above roof (allow 15 sf) and replace cracked clay flue tile at top.

Doors
- Repair/reglaze/prep/paint all doors (4 ea).

Porches
- Replace modern porch posts with traditionally detailed posts, including decorative trim (4 ea).
- Repair/prepare/paint porches (allow $3,000).

Floors and Flooring
- Pour concrete slab-on-grade in basement (allow 12 cy), including thickened areas for new/existing posts.
- Per the structural recommendations, repair/replace rotted or inadequately-sized first-floor beams.

Walls and Ceilings
- Repoint lower half of rubble stone basement walls (allow 600 sf).
- Repair hole in ceiling at ell (allow $750).

Trim and Finishes
- Replace mildew-damaged areas of kitchen ceiling; provide new GWB throughout, in conjunction with structural improvements (allow $4,000).
- Replace baluster at stair balcony (allow $500).
- Prepare and paint ell ceiling, following repairs (275 sf).
- Prepare and re-varnish paneling at ell (allow 475 sf).
- Prepare and re-varnish V-groove paneling at Dining Room (allow 300 sf).
- Document extant linoleum and wallpaper prior to alteration and/or removal (allow $750).
- Prepare and paint original wide-board flooring (allow 750 sf).

Fireplace
- Inspect and repair metal damper.
- Scrape and refinish steel heating grilles built into chimney (2 ea).

Insulation
- Provide batt insulation at attic, where accessible (allow 250 sf).

Miscellaneous
- In conjunction with other stabilization measures, provide portable, commercial-grade dehumidifier for use in basement (allow $1,000).

10. Rehabilitation Costs

The preliminary estimates below represent consideration of repair and renovation options at Beartown State Forest Headquarters House. Based on the above recommendations, costs were estimated for stabilizing, repairing, improving and renovating the extant building and selected site features. These estimates are intended for planning purposes only. Because the cost estimator does not have control over market conditions or over individual contractors, or when the work will actually be solicited, actual construction costs may differ.

While potentially hazardous materials observed during the course of the fieldwork have been referenced or mentioned, detailed costs for testing and abatement of such materials, including the costs for required air-quality monitoring if any, are not included in the estimates. Nonetheless, it should be assumed that such hazardous materials exist until tests by independent testing agencies confirm or refute these preliminary assumptions.

Where applicable, costs for a commercial-office rehabilitation option have been included. Consequently, the summary and cost-per-element bar charts address both options.

Beartown Headquarter House, Beartown State Forest, Monterey, MA.

Cost Estimate

Prepared for:-
BH+A

Prepared by:-
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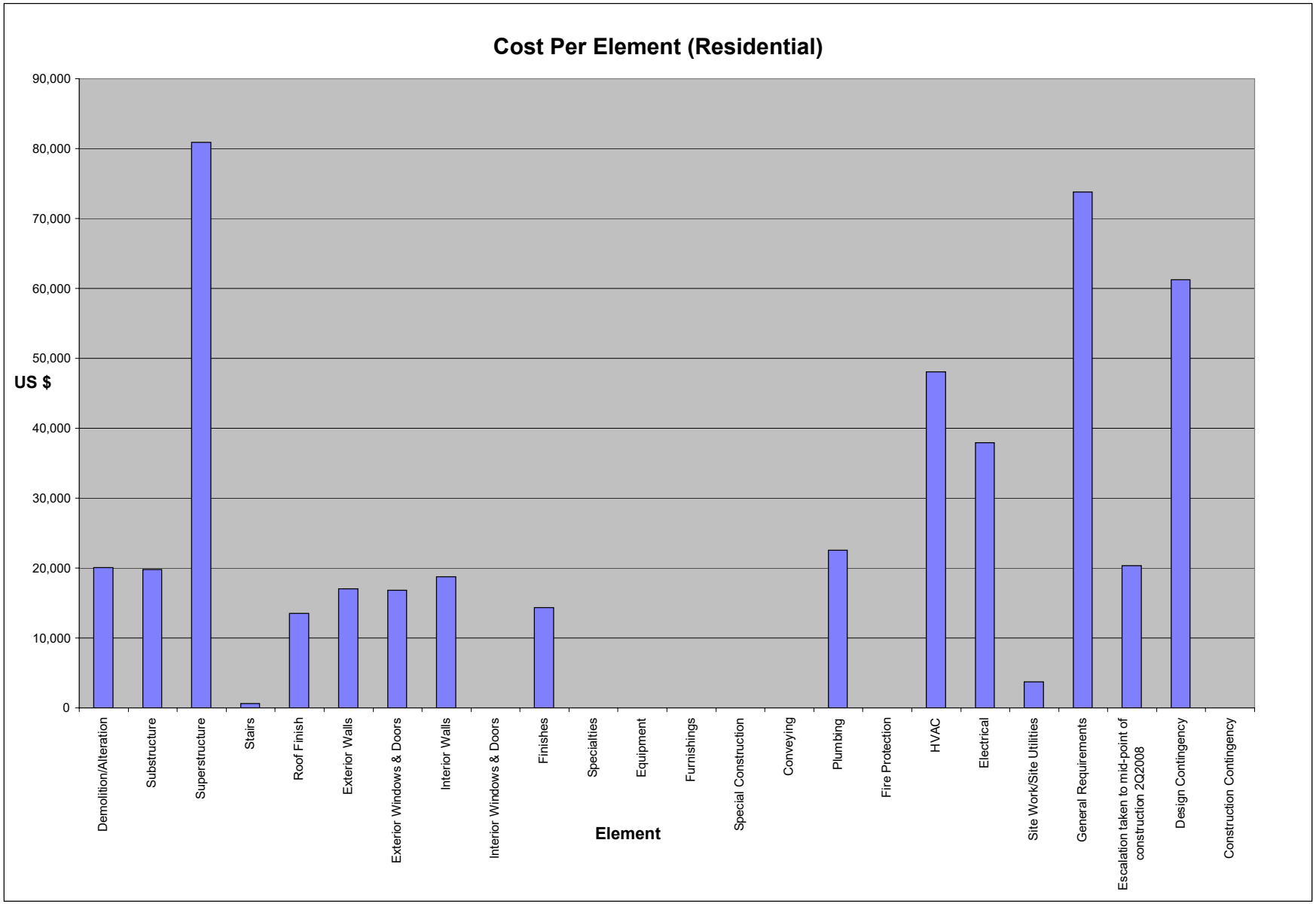
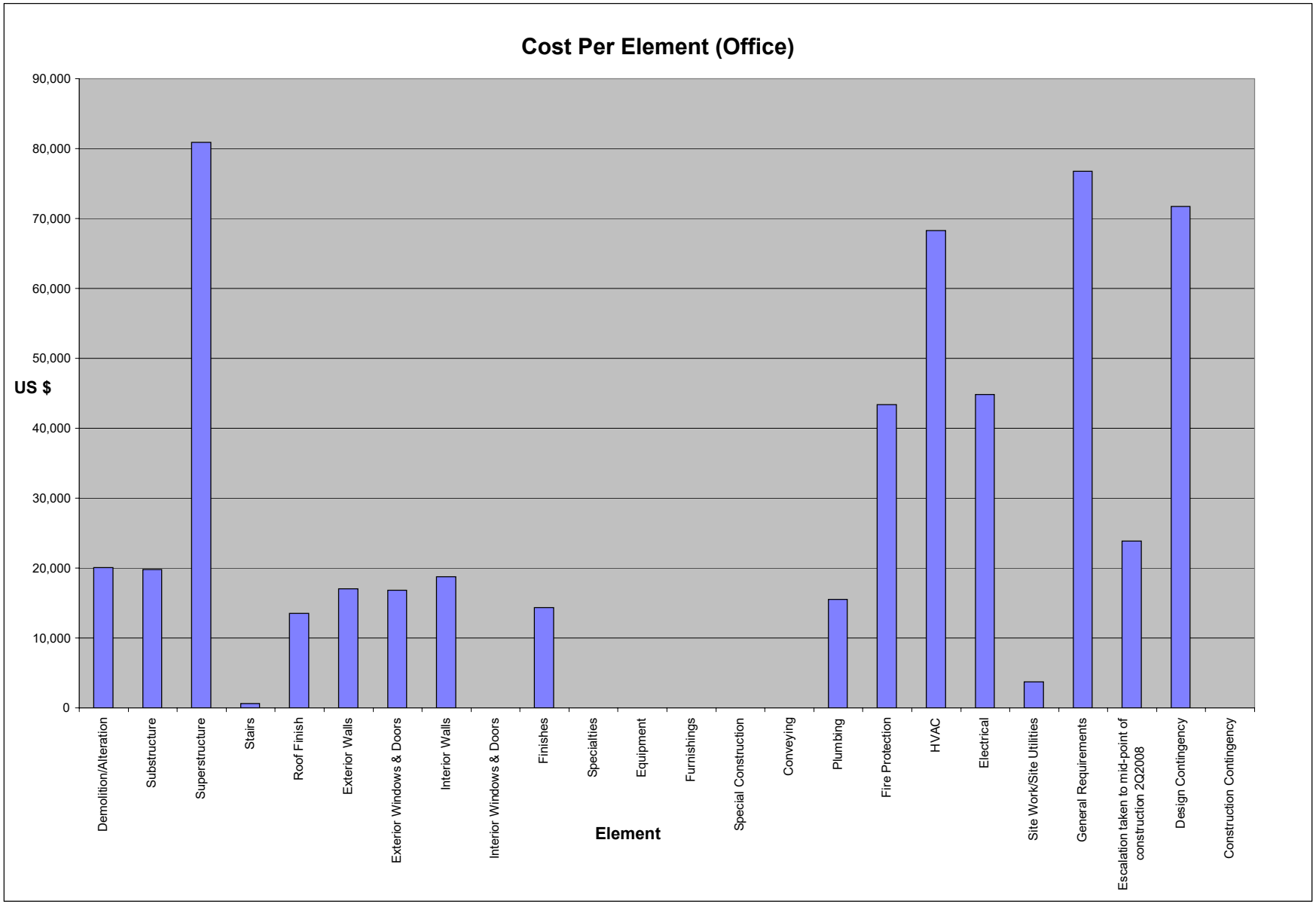
July 16, 2007

Contents

SUMMARY

		Office			Residential		
Gross Floor Area (in square feet)	=	**3,446**			**3,446**		
Element Name		**Cost $**	**$/sf**	**% of Bldg.**	**Cost $**	**$/sf**	**% of Bldg.**
Demolition/Alteration		20,073	5.83	5.37%	20,073	5.83	6.47%
Substructure		19,800	5.75	5.30%	19,800	5.75	6.38%
Superstructure		80,885	23.47	21.63%	80,885	23.47	26.05%
Stairs		640	0.19	0.17%	640	0.19	0.21%
Roof Finish		13,546	3.93	3.62%	13,546	3.93	4.36%
Exterior Walls		17,025	4.94	4.55%	17,025	4.94	5.48%
Exterior Windows & Doors		16,798	4.87	4.49%	16,798	4.87	5.41%
Interior Walls		18,775	5.45	5.02%	18,775	5.45	6.05%
Interior Windows & Doors		0	0.00	0.00%	0	0.00	0.00%
Finishes		14,345	4.16	3.84%	14,345	4.16	4.62%
Specialties		0	0.00	0.00%	0	0.00	0.00%
Equipment		0	0.00	0.00%	0	0.00	0.00%
Furnishings		0	0.00	0.00%	0	0.00	0.00%
Special Construction		0	0.00	0.00%	0	0.00	0.00%
Conveying		0	0.00	0.00%	0	0.00	0.00%
Plumbing		15,520	4.50	4.15%	22,549	6.54	7.26%
Fire Protection		43,351	12.58	11.59%	0	0.00	0.00%
HVAC		68,307	19.82	18.27%	48,096	13.96	15.49%
Electrical		44,839	13.01	11.99%	37,934	11.01	12.22%
Sub-Total Building		**373,903**	**108.50**	**100%**	**310,467**	**90.09**	**100%**
Site Work/Site Utilities		3,750	1.09		3,750	1.09	
Sub-Total Construction		**377,653**	**109.59**		**314,217**	**91.18**	
General Requirements		76,757	22.27		73,795	21.41	
Escalation taken to mid-point of construction 2Q2008	5.25%	23,857	6.92		20,371	5.91	
Design Contingency	15.00%	71,740	20.82		61,257	17.78	
Construction Contingency			By Owner			By Owner	
Total Construction Cost		**550,006**	**159.61**		**469,639**	**136.29**	


Cost Per Element (Residential)
US $
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Demolition/Alteration
Substructure
Superstructure
Stairs
Roof Finish
Exterior Walls
Exterior Windows & Doors
Interior Walls
Interior Windows & Doors
Finishes
Specialties
Equipment
Furnishings
Special Construction
Conveying
Plumbing
Fire Protection
HVAC
Electrical
Site Work/Site Utilities
General Requirements
Escalation taken to mid-point of construction 2Q2008
Design Contingency
Construction Contingency
Element


Cost Per Element (Office)
US $
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Demolition/Alteration
Substructure
Superstructure
Stairs
Roof Finish
Exterior Walls
Exterior Windows & Doors
Interior Walls
Interior Windows & Doors
Finishes
Specialties
Equipment
Furnishings
Special Construction
Conveying
Plumbing
Fire Protection
HVAC
Electrical
Site Work/Site Utilities
General Requirements
Escalation taken to mid-point of construction 2Q2008
Design Contingency
Construction Contingency
Element

Notes

1. Brief project description:-
   - Renovation of extg historic building to residential or office use complete w/both structural & MEP upgrades.

2. The estimate is based on the following:-
   - Prevailing wage.
   - Competitive bid to pre-selected contractors.
   - General contractor type project.
   - Receipt of 5# bona fide bids.
   - Construction period of 3 months.

3. The gross floor areas are based on the following:-
   - Measurement is taken to the outside face of the exterior wall.
   - Voids are deleted.

4. Story heights:-
   - Varies.

5. General Requirements for this project are listed and priced later in this document.

6. Special Conditions for this project are included with General Requirements.

7. Escalation taken to mid-point of construction (2Q2008) @ 7% per annum.
   - Note: Escalation is taken on the sum of Sub Total Construction and General Requirements.

8. Design contingency is an allowance for future design modifications/additions, which alter the cost of the building as the design progresses, this percentage reduces as the design develops. It is based on a percentage of the sum of Sub-Total Construction, General Requirements, Special Conditions and Escalation. For this level of estimate the following has been included:-
   - 15.00%

9. Construction contingency is an allowance for scope/design modifications made by the owner during construction and also for any unforeseen circumstances. It is based on a percentage of the sum of Sub-Total Construction, General Requirements, Special Conditions, Escalation and Estimating Contingency. The following has been included:-
   - 0.00%

10. This estimate has been prepared from the following design information:-
    - Architectural plans received July 10, 2007
    - Telephone conversations w/BH+A

Notes (Cont'd)

11. The estimate includes the following:-
    - Water removal during excavation work.
    - Rock removal during excavation work.
    - See Estimate.

12. The estimate excludes the following:-
    - Utility company backcharges.
    - Building permit fees.
    - Sales tax.
    - Design consultant's fees.
    - Asbestos abatement/hazardous waste removal.
    - Loose furniture, fittings and equipment.
    - Fixed furniture, fittings and equipment except as listed in the Estimate.
    - Fire pump.
    - Generator.
    - Telephones.
    - Complete audiovisual.
    - Cameras, monitors, videos etc.
    - Lightning protection.
    - Kitchen appliances

13. Allowances:-
    - See Estimate.

14. Assumptions:-
    - See Estimate.

15. Estimates by other firms:-
    - See Estimate.

Notes (Cont'd)

16. Common abbreviations included in this estimate:-
    - ac = air conditioning.
    - cd = construction documents.
    - cf = cubic foot.
    - cy = cubic yard.
    - dd = design development.
    - dl = double leaf.
    - ea = each.
    - EO = extra over.
    - flr = floor.
    - gfa = gross floor area.
    - ilo = in lieu of.
    - lb = pound.
    - lf = linear foot.
    - ls = lump sum.
    - ly = linear yard.
    - mg = make good.
    - opg = opening.
    - rc = reinforced concrete.
    - rsr = riser.
    - sd = schematic design.
    - sf = square foot.
    - sl = single leaf.
    - sog = slab on grade.
    - sy = square yard.
    - tn = ton.
    - vb = vapor barrier.

17. Builders work in connection (BWIC) with conveying, mechanical and electrical systems includes the following:-
    - Drilling and coring.
    - Chasing.
    - Cutting and patching.

18. General contractor's overhead and profit included in rates unless stated otherwise.

Description	Qty	Unit	Rate	Amount
Demolition/Alteration				
Water Service:-				
- test well water quality to ensure compliance with State				
drinking water standards *(budget by BH+A).*	1	ls	500.00	500
- protect well from contamination of the groundwater during ongoing operation				
and maintenance procedures at the Garage and House *(budget by BH+A).*	1	ls	500.00	500
Sanitary Service:-				
- perform a comprehensive Title 5 system inspection, including hand-excavation				
of key components, prior to occupancy of the House to identify any potential				
issues with the system *(budget by BH+A).*	1	ls	800.00	800
- pump out septic tank on a regular basis after the House is reoccupied.				Excluded
Remove extg gwb ceiling where damaged or structural work required, allow				
25% of ceiling area	862	sf	1.50	1,293
Carefully remove extg window & store for re-use *(quantities by BH+A)* :-				
- 2' wide x 3' 9" high	29	ea	24.50	711
- 2' x 2' high	10	ea	14.00	140
- storm windows	29	ea	24.50	711
Prepare extg opening for reinstallation of extg windows				
- 2' wide x 3' 9" high	29	ea	110.00	3,190
- 2' x 2' high	10	ea	80.00	800
Remove rotted *(quantities by BH+A)* :-				
- clapboard siding	300	sf	1.50	450
- casing/trim	250	lf	2.00	500
Prepare exterior wall for new paint	2,200	sf	0.25	550
Remove extg roof *(quantities by BH+A):-*				
- asphalt-shingle roof only	1,765	sf	3.00	5,295
- metal valley	12	lf	2.00	24
- aluminum drip-edge	181	lf	1.00	181
- wood trim	100	lf	1.00	100
- LCC flashing	181	lf	1.00	181
- gutter	30	lf	1.00	30
- leader	30	lf	1.00	30
Remove extg plumbing fixtures complete w/piping	4	ea	350.00	1,400
Remove as required, allow:-				
- HVAC	2,384	sf	0.25	596
- Electrical	2,384	sf	0.50	1,192
Inspect & repair metal damper *(budget by BH+A).*	1	ls	500.00	500
Scrape & refinish steel heating grills built into chimney *(budget by BH+A).*	2	ea	200.00	400
Demolition/Alteration **Total**				**20,073**
Substructure				
Repoint lower half of rubble stone basement wall *(quantities by BH+A)* .	600	sf	20.00	12,000
Pour slab-on-grade in basement complete w/excavation, concrete				
formwork, reinforcement, etc. complete *(quantities by BH+A)* .	12	cy	650.00	7,800
Substructure **Total**				**19,800**
Superstructure				
Roof Structure *(budget by BH+A)* :-				
- sister new rafters to deteriorated existing rafter pairs adjacent to the chim	1	ls	750.00	750

Description	Qty	Unit	Rate	Amount
- expose dip at east side of roof at north end of dormer; repair undersized				
and/or deteriorated rafter upon which dormer wall was built.	1	ls	4,000.00	4,000
- dismantle and rebuild in like kind masonry at chimney (above roof), using				
mortar similar to original bedding mortar and sympathetic to properties				
of brick units.	1	ls	5,000.00	5,000
Second Floor Structure *(budget by BH+A)* :-				
- consult pest management expert to verify source of sawdust piles -				
suspected to be carpenter ants. Provide borate treatment throughout				
house (at all exposed framing).	1	ls	10,000.00	10,000
- at sagging ceiling above kitchen area, introduce new posts beneath the two				
deflecting old chimney girts, in order to reduce their span.				Not Required
- alternatively, expose soffit of beam and sister on each side with				
engineered lumber or steel.	1	ls	2,500.00	2,500
First Floor Structure *(budget by BH+A)* :-				
- at west entrance, south side and elsewhere as required, selectively remove				
deteriorated framing systems and replace with properly designed beams,				
posts and footings to carry the loads required by the State Building Code.				
Reinforce sound, intermediate framing as required to carry required loads	1	ls	15,000.00	15,000
- clean out and repair stone-lined basement window wells	1	ls	15,000.00	15,000
- replace rotted framing below laundry/bath room (in conjunction				
with precipitation management described elsewhere).	1	ls	2,500.00	2,500
- at small area of first-floor framing deteriorated due to roof leak above,				
sister damaged joists as necessary.	1	ls	750.00	750
Perimeter Walls, Sills and Foundations *(quantities by BH+A)* :-				
- replace rotted building sills, in like kind using naturally rot-resistant white				
oak timbers; allow 80% replacement. Match and/or replicate joinery of				
existing beams, joists, posts and studs during replacement.	181	lf	20.00	3,620
- repoint stone basement walls 100%, up to 5 feet above floor.	905	sf	15.00	13,575
Repairs to porches *(quantities by BH+A)* :-				
- remove extg porch post	4	ea	85.00	340
- new wood post complete w/paint	48	lf	25.00	1,200
- EO for detail @ top & bottom of post complete w/paint	8	ea	250.00	2,000
- allow for connection @ top @ bottom of ditto	8	ea	50.00	400
- allow for temporary support to porch structure	1	ls	1,250.00	1,250
Repair, prepare, paint extg porches, allow	1	ls	3,000.00	3,000
Superstructure	**Total**			**80,885**
Stairs				
Remove baluster @ stair balcony	4	lf	10.00	40
Baluster @ stair balcony complete w/paint	4	lf	150.00	600
Stairs	**Total**			**640**
Roof Finish				
Asphalt-shingle roof system:-				
- asphalt-shingle roof *(quantities by BH+A)*	1,765	sf	3.50	6,178
- rigid insulation				ETR
- vapor barrier				ETR
- plywood sheathing				ETR
Batt insulation @ attic, *(quantities by BH+A)*	250	sf	1.85	463
LCC Stepped flashing @ roof/wall & roof dormer *(quantities by BH+A)*	50	lf	15.00	750

Description	Qty	Unit	Rate	Amount
LCC open valley *(quantities by BH+A)*	13	lf	20.00	260
Perimeter roof flashing *(quantities by BH+A)*	181	lf	8.00	1,448
Wood trim @ roof edge complete w/paint *(quantities by BH+A)*	181	lf	15.00	2,715
Gutter to sloped roof *(quantities by BH+A)*	33	lf	12.00	396
Down spout to sloped roof *(quantities by BH+A)*	33	lf	15.00	495
Allow for:-				
- sealant	181	lf	1.65	299
- blocking	181	lf	3.00	543
Roof Finish	**Total**			**13,546**
Exterior Walls				
New exterior clapboard siding complete w/paint *(quantities by BH+A)*	300	lf	10.00	3,000
New exterior casing/trim complete w/paint *(quantities by BH+A)*	250	sf	25.00	6,250
Wood louver gable vent, allow 30sf *(quantities by BH+A)*	2	ea	1,950.00	3,900
Paint exterior wall *(quantities by BH+A)*	2,200	sf	1.25	2,750
Allow for:-				
- blocking	250	lf	3.00	750
- sealant	250	lf	1.50	375
Exterior Walls	**Total**			**17,025**
Exterior Windows & Doors				
Reglaze extg windows *(quantities by BH+A)* :-				
- 2' wide x 3' 9" high	29	ea	175.00	5,075
- 2' x 2' high	10	ea	100.00	1,000
Reinstall extg windows *(quantities by BH+A)* :-				
- 2' wide x 3' 9" high	29	ea	70.00	2,030
- 2' x 2' high	10	ea	40.00	400
- storm windows	29	ea	35.00	1,015
Paint extg windows *(quantities by BH+A)* :-				
- 2' wide x 3' 9" high	29	ea	35.00	1,015
- 2' x 2' high	10	ea	20.00	200
Work to extg door sl door *(quantities by BH+A)* :-				
- carefully remove	4	ea	35.00	140
- reglaze	4	ea	360.00	1,440
- paint	4	ea	105.00	420
- reinstall	4	ea	50.00	200
- re-finish extg door frame	4	ea	68.00	272
Allow for:-				
- flashing, dpm, etc	399	lf	4.50	1,796
- blocking	399	lf	3.00	1,197
- sealant	399	lf	1.50	599
Exterior Windows & Doors	**Total**			**16,798**
Interior Walls				
Repoint stone chimney, provide sealant, repair copper stepped flashing, all	1	ls	10,000.00	10,000
Rebuild clay-brick chimney above roof *(quantities by BH+A)*	15	sf	85.00	1,275

Description	Qty	Unit	Rate	Amount
Replace cracked flue tile @ top *(budget by BH+A)*	1	ls	2,500.00	2,500
Patch & repair extg interior partition *(budget by BH+A)*	1	ls	5,000.00	5,000
Interior Walls	**Total**			**18,775**
Interior Windows & Doors				
No Work in this Element				
Interior Windows & Doors	**Total**			**0**
Finishes				
GWB ceiling complete w/framing & paint *(quantities by BH+A)*	862	sf	10.00	8,620
Repair hole in ceiling *(budget by BH+A)*	1	ls	750.00	750
Prepare & paint ell ceiling after repairs *(quantities by BH+A)*	275	sf	1.50	413
Prepare & re-varnish paneling at ell *(quantities by BH+A)*	475	sf	2.50	1,188
Prepare & re-varnish paneling at Dinning Room *(quantities by BH+A)*	300	sf	2.50	750
Document extent of linoleum & wallpaper prior to alteration and/or removal	1	ls	750.00	750
Prepare & paint original wide-board flooring *(quantities by BH+A)*	750	sf	2.50	1,875
Finishes	**Total**			**14,345**
Specialties				
No Work in this Element				
Specialties	**Total**			**0**
Equipment				
No Work in this Element				
Equipment	**Total**			**0**
Furnishings				
No Work in this Element				
Furnishings	**Total**			**0**
Special Construction				
No Work in this Element				
Special Construction	**Total**			**0**

Description	Qty	Unit	Rate	Amount
Conveying				
No Work in this Element				
Conveying	**Total**			**0**
Plumbing				
Sanitary fixtures w/accessories, pipework etc:-				
- wc, HC				Not Required
- wc, regular	2	ea	3,150.00	6,300
- lavatory, wall hung	2	ea	3,150.00	6,300
- lavatory, countertop type				Not Required
- urinal				Not Required
- bathtub	1	ea	3,500.00	3,500
- shower	1	ea	3,000.00	3,000
- drinking fountain				Not Required
- sink to:-				
- kitchen				Not Required
- janitor's sink				Not Required
- floor drains, allow:-				ETR
- wall hydrants	1	ls	500.00	500
- water heater, allow				ETR
Seismic restraint	1	ls	500.00	500
Test & balance	1	ls	750.00	750
Sub Bid	**Total**			**20,850**
Builders work in connection with Plumbing @ 3%	1	ls	625.50	626
General Contractor's overhead and profit @ 5%	1	ls	1,073.78	1,074
Plumbing	**Total**			**22,549**
Fire Protection				
No Work in this Element				
Fire Protection	**Total**			**0**
HVAC				
Equipment				
Oil-fired boiler, 150000-btu	1	ea	5,500.00	5,500
Oil tank	1	ea	3,500.00	3,500
Pump	1	ea	2,500.00	2,500
Exhaust fan to toilets	2	ea	950.00	1,900
Commercial-grade dehumidifier @ basement	1	ea	1,000.00	1,000
Baseboard Radiator, allow	90	lf	65.00	5,850
Ductwork				

Description	Qty	Unit	Rate	Amount
Galvanized steel ductwork w/accessories, fittings, hangers, etc (22ga):-				
- exhaust ductwork only				Not Required
Flexible vent pipe for exhaust fans @ toilets	65	lf	65.00	4,225
Insulation to supply & return duct, allow				Not Required
Boiler vent, allow	45	lf	65.00	2,925
Diffusers/grilles/registers:-				
- supply, allow 1/250sf				Not Required
- return, allow 1/250sf				Not Required
- exhaust, allow 1/500sf	2	ea	115.00	230
Dampers, allow:-				
- volume	2	ea	75.00	150
- fire	2	ea	135.00	270
- smoke	2	ea	155.00	310
Pipework				
Allow for pipework, accessories, valves, etc (gfa)	2,384	sf	3.50	8,344
Temperature Control Systen				
Temperature control system, allow	2,384	sf	2.00	4,768
General				
Allow for seismic restraint, vibration isolation, etc	1	ls	500.00	500
Test & balance	1	ls	2,500.00	2,500
Sub Bid	**Total**			**44,472**
Builders work in connection with HVAC @ 3%	1	ls	1,334.16	1,334
General Contractor's overhead and profit @ 5%	1	ls	2,290.31	2,290
HVAC	**Total**			**48,096**
Electrical				
Panelboards, Etc.				
125A panelboard	1	ea	1,050.00	1,050
Feeders				
125A service, allow 100' away from building	100	lf	60.00	6,000
Allow for feeders (gfa)				ETR
Small Power				
Replace extg receptacles, wiring to remain, allow	2,384	sf	0.50	1,192
Allow for power to mechanical equipment	6	ea	500.00	3,000
Lighting				
Allow for lighting (gfa)	2,384	sf	6.50	15,496
Metal-halide exterior light	2	ea	627.00	1,254
Rewire & repair "period" light fixture	5	ea	297.00	1,485
Fire Alarm				
Fire alarm system allow	2,384	sf	1.50	3,576
Tel/Data System (fully cabled system)				
Replace extg receptacles, wiring to remain, allow	2,384	sf	0.30	715
Cable TV System (empty conduit system)				
Allow for cable tv system (gfa)				Not Required
Security System (empty conduit system)				
Allow for security system (gfa)				Not Required
Grounding				
Allow for grounding (gfa	2,384	sf	0.15	358
General				
Allow for seismic restraint	1	ls	350.00	350
Test	1	ls	600.00	600

Description	Qty	Unit	Rate	Amount
Sub Bid	**Total**			**35,076**
Builders work in connection with electrical @ 3%	1	ls	1,052.27	1,052
General Contractor's overhead and profit @ 5%	1	ls	1,806.40	1,806
Electrical	**Total**			**37,934**
Site Work/Site Utilities				
Storm Drain Service				
- In conjunction with a new system of gutters and downspouts, provide				
extensions in critical areas, and re-grade as necessary (allow 250 SF)				
to direct roof runoff away from the House foundation.	250	sf	15.00	3,750
Site Work/Site Utilities	**Total**			**3,750**

Description	Qty	Unit	Rate	Amount
Demolition/Alteration				
Water Service:-				
- test well water quality to ensure compliance with State				
drinking water standards *(budget by BH+A).*	1	ls	500.00	500
- protect well from contamination of the groundwater during ongoing operation				
and maintenance procedures at the Garage and House *(budget by BH+A).*	1	ls	500.00	500
Sanitary Service:-				
- perform a comprehensive Title 5 system inspection, including hand-excavation				
of key components, prior to occupancy of the House to identify any potential				
issues with the system *(budget by BH+A).*	1	ls	800.00	800
- pump out septic tank on a regular basis after the House is reoccupied.				Excluded
Remove extg gwb ceiling where damaged or structural work required, allow				
25% of ceiling area	862	sf	1.50	1,293
Carefully remove extg window & store for re-use *(quantities by BH+A)* :-				
- 2' wide x 3' 9" high	29	ea	24.50	711
- 2' x 2' high	10	ea	14.00	140
- storm windows	29	ea	24.50	711
Prepare extg opening for reinstallation of extg windows				
- 2' wide x 3' 9" high	29	ea	110.00	3,190
- 2' x 2' high	10	ea	80.00	800
Remove rotted *(quantities by BH+A)* :-				
- clapboard siding	300	sf	1.50	450
- casing/trim	250	lf	2.00	500
Prepare exterior wall for new paint	2,200	sf	0.25	550
Remove extg roof *(quantities by BH+A):-*				
- asphalt-shingle roof only	1,765	sf	3.00	5,295
- metal valley	12	lf	2.00	24
- aluminum drip-edge	181	lf	1.00	181
- wood trim	100	lf	1.00	100
- LCC flashing	181	lf	1.00	181
- gutter	30	lf	1.00	30
- leader	30	lf	1.00	30
Remove extg plumbing fixtures complete w/piping	4	ea	350.00	1,400
Remove as required, allow:-				
- HVAC	2,384	sf	0.25	596
- Electrical	2,384	sf	0.50	1,192
Inspect & repair metal damper *(budget by BH+A).*	1	ls	500.00	500
Scrape & refinish steel heating grills built into chimney *(budget by BH+A).*	2	ea	200.00	400
Demolition/Alteration **Total**				**20,073**
Substructure				
Repoint lower half of rubble stone basement wall *(quantities by BH+A)* .	600	sf	20.00	12,000
Pour slab-on-grade in basement complete w/excavation, concrete				
formwork, reinforcement, etc. complete *(quantities by BH+A)* .	12	cy	650.00	7,800
Substructure **Total**				**19,800**
Superstructure				
Roof Structure *(budget by BH+A)* :-				
- sister new rafters to deteriorated existing rafter pairs adjacent to the chim	1	ls	750.00	750

Description	Qty	Unit	Rate	Amount
- expose dip at east side of roof at north end of dormer; repair undersized				
and/or deteriorated rafter upon which dormer wall was built.	1	ls	4,000.00	4,000
- dismantle and rebuild in like kind masonry at chimney (above roof), using				
mortar similar to original bedding mortar and sympathetic to properties				
of brick units.	1	ls	5,000.00	5,000
Second Floor Structure *(budget by BH+A)* :-				
- consult pest management expert to verify source of sawdust piles -				
suspected to be carpenter ants. Provide borate treatment throughout				
house (at all exposed framing).	1	ls	10,000.00	10,000
- at sagging ceiling above kitchen area, introduce new posts beneath the two				
deflecting old chimney girts, in order to reduce their span.				Not Required
- alternatively, expose soffit of beam and sister on each side with				
engineered lumber or steel.	1	ls	2,500.00	2,500
First Floor Structure *(budget by BH+A)* :-				
- at west entrance, south side and elsewhere as required, selectively remove				
deteriorated framing systems and replace with properly designed beams,				
posts and footings to carry the loads required by the State Building Code.				
Reinforce sound, intermediate framing as required to carry required loads	1	ls	15,000.00	15,000
- clean out and repair stone-lined basement window wells	1	ls	15,000.00	15,000
- replace rotted framing below laundry/bath room (in conjunction				
with precipitation management described elsewhere).	1	ls	2,500.00	2,500
- at small area of first-floor framing deteriorated due to roof leak above,				
sister damaged joists as necessary.	1	ls	750.00	750
Perimeter Walls, Sills and Foundations *(quantities by BH+A)* :-				
- replace rotted building sills, in like kind using naturally rot-resistant white				
oak timbers; allow 80% replacement. Match and/or replicate joinery of				
existing beams, joists, posts and studs during replacement.	181	lf	20.00	3,620
- repoint stone basement walls 100%, up to 5 feet above floor.	905	sf	15.00	13,575
Repairs to porches *(quantities by BH+A)* :-				
- remove extg porch post	4	ea	85.00	340
- new wood post complete w/paint	48	lf	25.00	1,200
- EO for detail @ top & bottom of post complete w/paint	8	ea	250.00	2,000
- allow for connection @ top @ bottom of ditto	8	ea	50.00	400
- allow for temporary support to porch structure	1	ls	1,250.00	1,250
Repair, prepare, paint extg porches, allow	1	ls	3,000.00	3,000
Superstructure	**Total**			**80,885**
Stairs				
Remove baluster @ stair balcony	4	lf	10.00	40
Baluster @ stair balcony complete w/paint	4	lf	150.00	600
Stairs	**Total**			**640**
Roof Finish				
Asphalt-shingle roof system:-				
- asphalt-shingle roof *(quantities by BH+A)*	1,765	sf	3.50	6,178
- rigid insulation				ETR
- vapor barrier				ETR
- plywood sheathing				ETR
Batt insulation @ attic, *(quantities by BH+A)*	250	sf	1.85	463
LCC Stepped flashing @ roof/wall & roof dormer *(quantities by BH+A)*	50	lf	15.00	750

Description	Qty	Unit	Rate	Amount
LCC open valley *(quantities by BH+A)*	13	lf	20.00	260
Perimeter roof flashing *(quantities by BH+A)*	181	lf	8.00	1,448
Wood trim @ roof edge complete w/paint *(quantities by BH+A)*	181	lf	15.00	2,715
Gutter to sloped roof *(quantities by BH+A)*	33	lf	12.00	396
Down spout to sloped roof *(quantities by BH+A)*	33	lf	15.00	495
Allow for:-				
- sealant	181	lf	1.65	299
- blocking	181	lf	3.00	543
Roof Finish	**Total**			**13,546**
Exterior Walls				
New exterior clapboard siding complete w/paint *(quantities by BH+A)*	300	lf	10.00	3,000
New exterior casing/trim complete w/paint *(quantities by BH+A)*	250	sf	25.00	6,250
Wood louver gable vent, allow 30sf *(quantities by BH+A)*	2	ea	1,950.00	3,900
Paint exterior wall *(quantities by BH+A)*	2,200	sf	1.25	2,750
Allow for:-				
- blocking	250	lf	3.00	750
- sealant	250	lf	1.50	375
Exterior Walls	**Total**			**17,025**
Exterior Windows & Doors				
Reglaze extg windows *(quantities by BH+A)* :-				
- 2' wide x 3' 9" high	29	ea	175.00	5,075
- 2' x 2' high	10	ea	100.00	1,000
Reinstall extg windows *(quantities by BH+A)* :-				
- 2' wide x 3' 9" high	29	ea	70.00	2,030
- 2' x 2' high	10	ea	40.00	400
- storm windows	29	ea	35.00	1,015
Paint extg windows *(quantities by BH+A)* :-				
- 2' wide x 3' 9" high	29	ea	35.00	1,015
- 2' x 2' high	10	ea	20.00	200
Work to extg door sl door *(quantities by BH+A)* :-				
- carefully remove	4	ea	35.00	140
- reglaze	4	ea	360.00	1,440
- paint	4	ea	105.00	420
- reinstall	4	ea	50.00	200
- re-finish extg door frame	4	ea	68.00	272
Allow for:-				
- flashing, dpm, etc	399	lf	4.50	1,796
- blocking	399	lf	3.00	1,197
- sealant	399	lf	1.50	599
Exterior Windows & Doors	**Total**			**16,798**
Interior Walls				
Repoint stone chimney, provide sealant, repair copper stepped flashing, all	1	ls	10,000.00	10,000
Rebuild clay-brick chimney above roof *(quantities by BH+A)*	15	sf	85.00	1,275

Description	Qty	Unit	Rate	Amount
Replace cracked flue tile @ top *(budget by BH+A)*	1	ls	2,500.00	2,500
Patch & repair extg interior partition *(budget by BH+A)*	1	ls	5,000.00	5,000
Interior Walls	**Total**			**18,775**
Interior Windows & Doors				
No Work in this Element				
Interior Windows & Doors	**Total**			**0**
Finishes				
GWB ceiling complete w/framing & paint *(quantities by BH+A)*	862	sf	10.00	8,620
Repair hole in ceiling *(budget by BH+A)*	1	ls	750.00	750
Prepare & paint ell ceiling after repairs *(quantities by BH+A)*	275	sf	1.50	413
Prepare & re-varnish paneling at ell *(quantities by BH+A)*	475	sf	2.50	1,188
Prepare & re-varnish paneling at Dinning Room *(quantities by BH+A)*	300	sf	2.50	750
Document extent of linoleum & wallpaper prior to alteration and/or removal	1	ls	750.00	750
Prepare & paint original wide-board flooring *(quantities by BH+A)*	750	sf	2.50	1,875
Finishes	**Total**			**14,345**
Specialties				
No Work in this Element				
Specialties	**Total**			**0**
Equipment				
No Work in this Element				
Equipment	**Total**			**0**
Furnishings				
No Work in this Element				
Furnishings	**Total**			**0**
Special Construction				
No Work in this Element				
Special Construction	**Total**			**0**

Description	Qty	Unit	Rate	Amount
Conveying				
No Work in this Element				
Conveying	**Total**			**0**
Plumbing				
Sanitary fixtures w/accessories, pipework etc:-				
- wc, HC				Not Required
- wc, regular	2	ea	3,150.00	6,300
- lavatory, wall hung	2	ea	3,150.00	6,300
- lavatory, countertop type				Not Required
- urinal				Not Required
- bathtub				Not Required
- shower				Not Required
- drinking fountain				Not Required
- sink to:-				
- kitchen				Not Required
- janitor's sink				Not Required
- floor drains, allow:-				ETR
- wall hydrants	1	ls	500.00	500
- water heater, allow				ETR
Seismic restraint	1	ls	500.00	500
Test & balance	1	ls	750.00	750
Sub Bid	**Total**			**14,350**
Builders work in connection with Plumbing @ 3%	1	ls	430.50	431
General Contractor's overhead and profit @ 5%	1	ls	739.03	739
Plumbing	**Total**			**15,520**
Fire Protection				
Wet sprinkler system w/standpipes (gfa)	3,446	sf	4.00	13,784
Underground storage tank, 5000 gallon	1	ea	12,500.00	12,500
Trenching to ditto by others	1	ls	5,000.00	5,000
Piping from ditto to building, allow	25	lf	90.00	2,250
8" fire service	10	lf	85.00	850
Double check valve assembly	1	ea	1,400.00	1,400
Alarm check valve	1	ea	450.00	450
Water motor gong	1	ea	300.00	300
Fire department connection	1	ea	450.00	450
Allow for seismic restraint	1	ls	250.00	250
Permit fees	1	ls	350.00	350
Test and balance	1	ls	2,500.00	2,500
Sub Bid	**Total**			**40,084**
Builders work in connection with F. Protection @ 3%	1	ls	1,202.52	1,203

Description	Qty	Unit	Rate	Amount
General Contractor's overhead and profit @ 5%	1	ls	2,064.33	2,064
Fire Protection	**Total**			**43,351**
HVAC				
Equipment				
Oil-fired boiler, 150000-btu	1	ea	5,500.00	5,500
Oil-fired Furnace 85000-btu, 4 ton cooling	2	ea	4,110.00	8,220
Oil tank, allow 1000 gallon	1	ea	3,500.00	3,500
Pump	2	ea	2,500.00	5,000
Exhaust fan to toilets	2	ea	950.00	1,900
Commercial-grade dehumidifier @ basement	1	ea	1,000.00	1,000
Baseboard Radiator, allow				Not Required
Ductwork				
Galvanized steel ductwork w/accessories, fittings, hangers, etc (22ga):-				
- supply/return/exhaust, allow 0.60lb/sf	1,430	lb	6.85	9,796
Insulation to supply & return duct, allow	760	sf	3.75	2,850
Boiler vent, allow	45	lf	65.00	2,925
Diffusers/grilles/registers:-				
- supply, allow 1/250sf	10	ea	115.00	1,097
- return, allow 1/250sf	10	ea	115.00	1,097
- exhaust, allow 1/500sf	5	ea	115.00	548
Dampers, allow:-				
- volume	10	ea	75.00	715
- fire	10	ea	135.00	1,350
- smoke	10	ea	155.00	1,550
Pipework				
Allow for pipework, accessories, valves, etc (gfa)	2,384	sf	3.50	8,344
Temperature Control System				
Temperature control system, allow	2,384	sf	2.00	4,768
General				
Allow for seismic restraint, vibration isolation, etc	1	ls	500.00	500
Test & balance	1	ls	2,500.00	2,500
Sub Bid	**Total**			**63,159**
Builders work in connection with HVAC @ 3%	1	ls	1,894.78	1,895
General Contractor's overhead and profit @ 5%	1	ls	3,252.70	3,253
HVAC	**Total**			**68,307**
Electrical				
Panelboards, Etc.				
200A panelboard	1	ea	1,250.00	1,250
Feeders				
200A service, allow 100' away from building	100	lf	85.00	8,500
Allow for feeders (gfa)				ETR
Small Power				
Replace extg receptacles, wiring to remain, allow	2,384	sf	0.50	1,192
Allow for power to mechanical equipment	8	ea	500.00	4,000
Lighting				
Allow for lighting (gfa)	2,384	sf	6.50	15,496

Description	Qty	Unit	Rate	Amount
Metal-halide exterior light	2	ea	627.00	1,254
Rewire & repair "period" light fixture	5	ea	297.00	1,485
Fire Alarm				
Fire alarm system allow	2,384	sf	2.50	5,960
Tel/Data System (fully cabled system)				
Replace extg receptacles, wiring to remain, allow	2,384	sf	0.30	715
Cable TV System (empty conduit system)				
Allow for cable tv system (gfa)				Not Required
Security System (empty conduit system)				
Allow for security system (gfa)				Not Required
Grounding				
Allow for grounding (gfa	2,384	sf	0.15	358
General				
Allow for seismic restraint	1	ls	500.00	500
Test	1	ls	750.00	750
Sub Bid	**Total**			**41,460**
Builders work in connection with electrical @ 3%	1	ls	1,243.79	1,244
General Contractor's overhead and profit @ 5%	1	ls	2,135.18	2,135
Electrical	**Total**			**44,839**
Site Work/Site Utilities				
Storm Drain Service				
- In conjunction with a new system of gutters and downspouts, provide				
extensions in critical areas, and re-grade as necessary (allow 250 SF)				
to direct roof runoff away from the House foundation.	250	sf	15.00	3,750
Site Work/Site Utilities	**Total**			**3,750**

Description	Qty	% of Time Allocated	Unit	Rate	Amount
General Requirements (Office)					
Field personnel					
Field personnel:-					
- project manager	0.87	10%	week	2,600.00	2,254
- project superintendent	8.67	100%	week	2,400.00	20,808
- field engineer					Not Required
- MEP coordinator					Not Required
- labourer (1# labourer)	4.34	50%	week	2,850.00	12,355
Main office staff	2.00	25%	week	2,000.00	4,000
Insurance & Bond Cost					
Insurances (includes):-	1.00		ls	9,500.00	9,500
- builders risk					
- general liability					
- vehicle liability					
- pollution liability					
- workers compensation					Included in Labor
- umbrella coverage					
Performance bond.	1.00		ls	8,312.50	8,313
Temporary Utilities & Services					
Temporary utilities & services:-					
- temporary water & sewer service & distribution	8.67		week	125.00	1,084
- temporary water consumed	8.67		week	85.00	737
- temporary toilet rental & service	8.67		week	85.00	737
- temporary electricity consumed	8.67		week	85.00	737
- temporary heating system	8.67		week	85.00	737
- temporary heating fuel consumed	8.67		week	85.00	737
- emergency diesel generator fuel consumed	8.67		week	85.00	737
Additional Categories					
Preparation of progress schedules.	2.00		mth	150.00	300
Compilation/preparation of site survey data.	1.00		ls	850.00	850
Preparation of shop drawings.	1.00		ls	1,500.00	1,500
Construction photographs.	2.00		mth	25.00	50
Temporary construction.	8.67		week	75.00	650
Construction aids (safety nets, personnel protection					
equipment, partial scaffolding, etc)	8.67		week	50.00	434
Barriers and enclosures.	8.67		week	35.00	303
Security.	8.67		week	125.00	1,084
Access roads.	8.67		week	25.00	217
Temporary controls.	8.67		week	25.00	217
Project signs.	2.00		mth	50.00	100
Field offices and sheds	2.00		mth	750.00	1,500
Field office expenses.	8.67		week	175.00	1,517
Equipment rental	1.00		ls	500.00	500
Snow removal (8 times)					Not Required
Winter protection					Not Required
Interim cleaning	8.67		week	150.00	1,301
Final cleaning	1.00		ls	3,500.00	3,500
General Requirements (Office)	**Total**				**76,757**

Description	Qty	% of Time Allocated	Unit	Rate	Amount
General Requirements (Residential)					
Field personnel					
Field personnel:-					
- project manager	0.87	10%	week	2,600.00	2,254
- project superintendent	8.67	100%	week	2,400.00	20,808
- field engineer					Not Required
- MEP coordinator					Not Required
- labourer (1# labourer)	4.34	50%	week	2,850.00	12,355
Main office staff	2.00	25%	week	2,000.00	4,000
Insurance & Bond Cost					
Insurances (includes):-	1.00		ls	7,920.00	7,920
- builders risk					
- general liability					
- vehicle liability					
- pollution liability					
- workers compensation					Included in Labor
- umbrella coverage					
Performance bond.	1.00		ls	6,930.00	6,930
Temporary Utilities & Services					
Temporary utilities & services:-					
- temporary water & sewer service & distribution	8.67		week	125.00	1,084
- temporary water consumed	8.67		week	85.00	737
- temporary toilet rental & service	8.67		week	85.00	737
- temporary electricity consumed	8.67		week	85.00	737
- temporary heating system	8.67		week	85.00	737
- temporary heating fuel consumed	8.67		week	85.00	737
- emergency diesel generator fuel consumed	8.67		week	85.00	737
Additional Categories					
Preparation of progress schedules.	2.00		mth	150.00	300
Compilation/preparation of site survey data.	1.00		ls	850.00	850
Preparation of shop drawings.	1.00		ls	1,500.00	1,500
Construction photographs.	2.00		mth	25.00	50
Temporary construction.	8.67		week	75.00	650
Construction aids (safety nets, personnel protection					
equipment, partial scaffolding, etc)	8.67		week	50.00	434
Barriers and enclosures.	8.67		week	35.00	303
Security.	8.67		week	125.00	1,084
Access roads.	8.67		week	25.00	217
Temporary controls.	8.67		week	25.00	217
Project signs.	2.00		mth	50.00	100
Field offices and sheds	2.00		mth	750.00	1,500
Field office expenses.	8.67		week	175.00	1,517
Equipment rental	1.00		ls	500.00	500
Snow removal (8 times)					Not Required
Winter protection					Not Required
Interim cleaning	8.67		week	150.00	1,301
Final cleaning	1.00		ls	3,500.00	3,500
General Requirements (Residential)	**Total**				**73,795**

Gross Floor Areas

Level	GFA (sf)	Perimeter (lf) Exterior	Interior
Basement	1,062	181	
1st Floor	1,412	181	
2nd Floor	972	147	
Total	**3,446**		

11. General Assumptions and Limiting Conditions

This building conditions survey is not a certification of the soundness of a building, a survey or a legal document, although assumptions regarding these and other matters are made.

1. Bargmann Hendrie + Archetype, Inc. ("BH+A") and its subcontractors will not be required to give testimony or appear in court as a result of having researched or prepared this report, with reference to the property in question, unless arrangements have been previously made therefore.

2. Any legal description used in this report is assumed to be correct.

3. No topographical or boundary survey of the property has been made by BH+A or its subcontractors and no responsibility is assumed in connection with such matters.

4. No responsibility is assumed for matters of a legal nature affecting title to the property, nor is an opinion of title rendered.

5. Information furnished by others is assumed to be true, correct and reliable, unless specifically noted otherwise.

6. While certain portions of the property were not accessible for inspection, it is assumed that there are no hidden or unapparent conditions of the property, subsoil or structure. No responsibility is assumed for such conditions or any engineering or testing which may be required to discover such factors.

7. It is assumed that there is full compliance with all federal, state and local environmental regulations and laws unless noncompliance has been stated, defined and considered in the review report.

12. Bibliography

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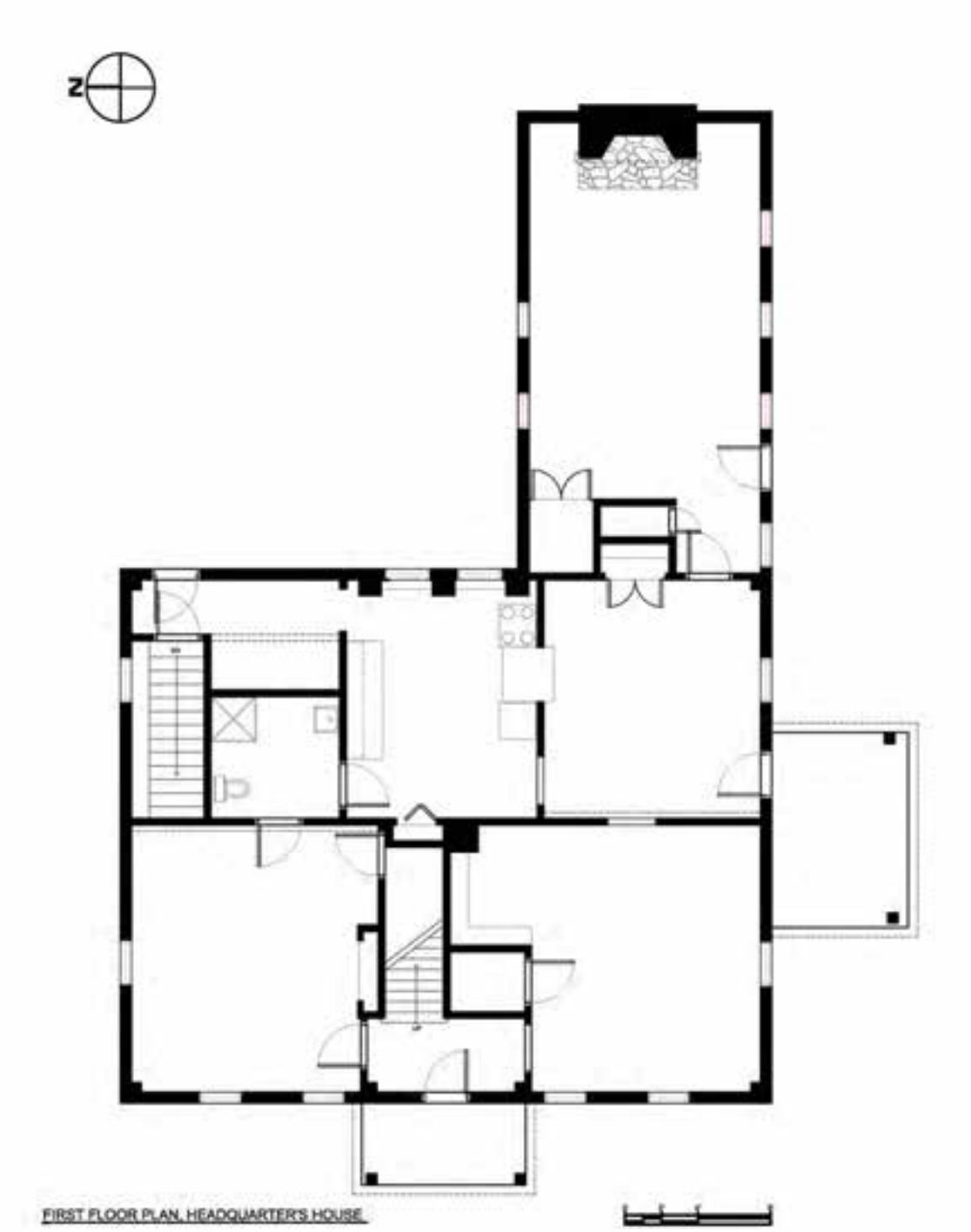
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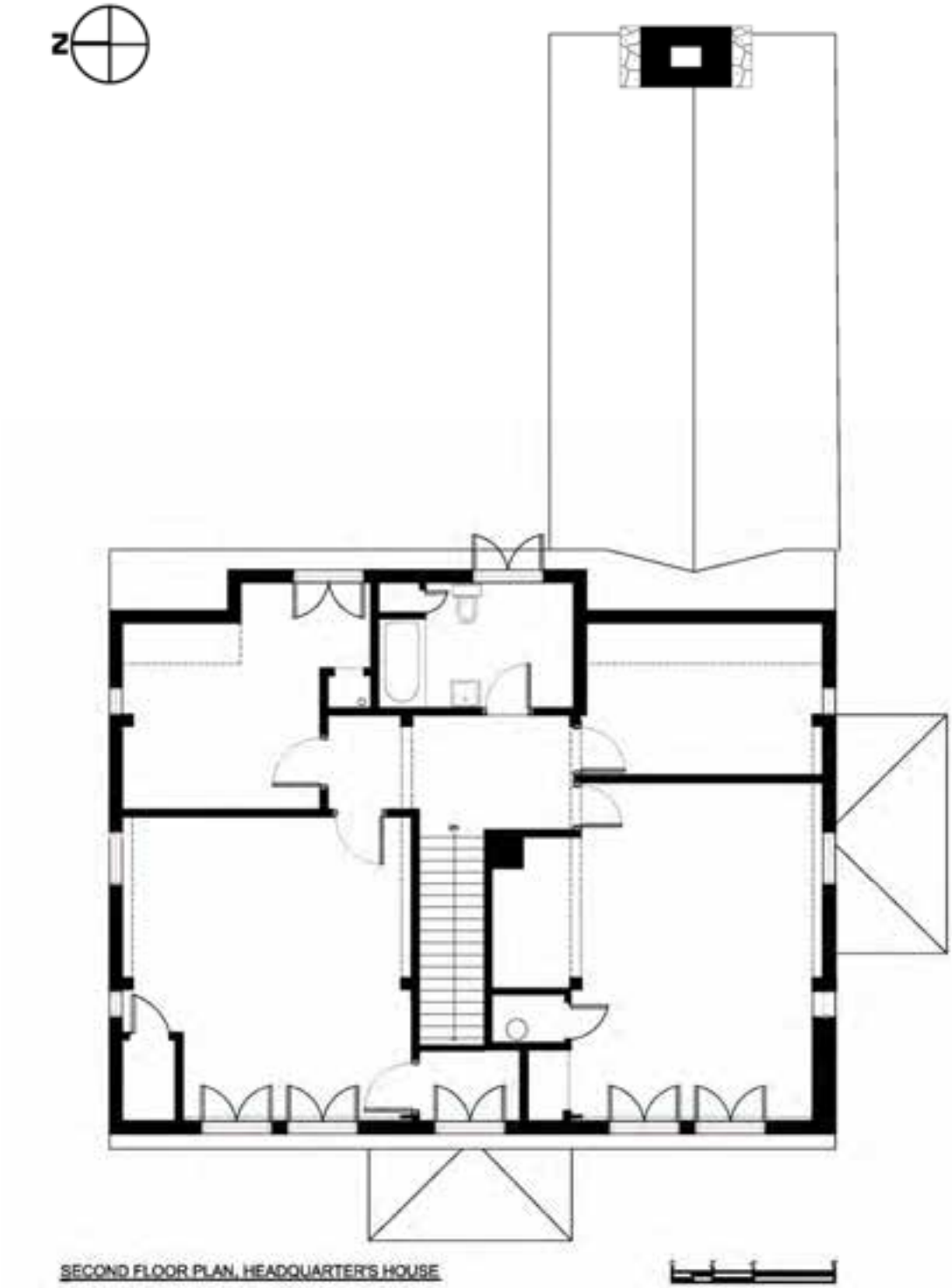
FIRST FLOOR PLAN, HEADQUARTER'S HOUSE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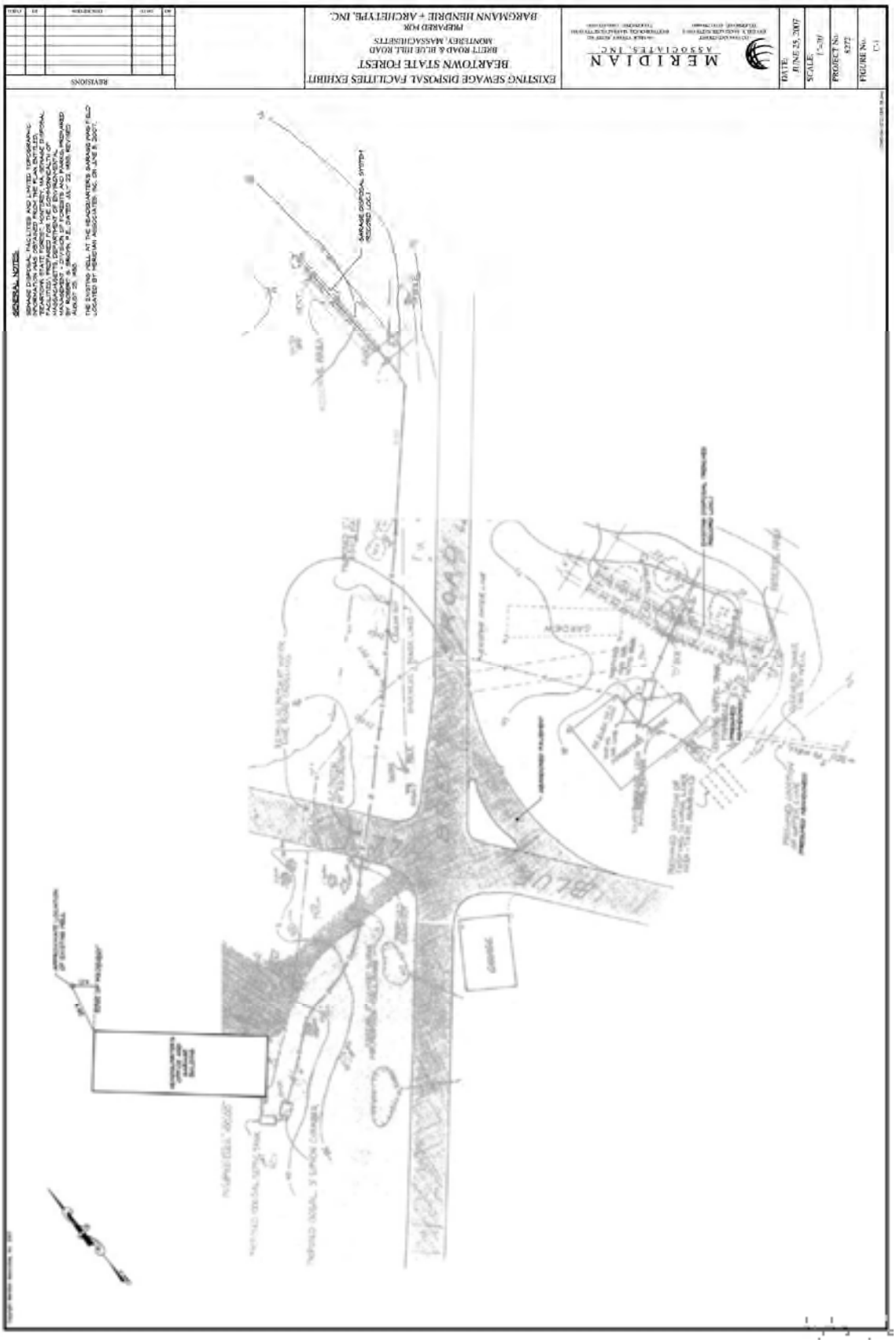
SECOND FLOOR PLAN, HEADQUARTER'S HOUSE


EXISTING SEWAGE DISPOSAL FACILITIES EXHIBIT
BEARTOWN STATE FOREST
BRITT ROAD & BLUE HILL ROAD
MONTEREY, MASSACHUSETTS
PREPARED FOR
BARGMANN HENDRIE + ARCHETYPE, INC.
MERIDIAN ASSOCIATES, INC.
DATE: JUNE 25, 2007
SCALE: 1"=20'
PROJECT No: 6272
FIGURE No: (-)
REVISIONS
GENERAL NOTES:
SEPTIC DISPOSAL FACILITIES AND LIMITED TOPOGRAPHIC INFORMATION HAS OBTAINED FROM THE PLAN ENTITLED "EXISTING SEWAGE DISPOSAL FACILITIES EXHIBIT" PREPARED FOR THE COMMONWEALTH OF MASSACHUSETTS DIVISION OF FORESTS AND PARKS, MANAGEMENT DIVISION OF FORESTS AND PARKS, PREPARED BY ROBERT A. BROWN, PE, DATED JULY 22, 1985, REVISED TO NOV. 1985.
THE EXISTING WELL AT THE HEADQUARTERS GARAGE WAS FIELD LOCATED BY HERSEY AND ASSOCIATES, INC. ON JUNE 2007.
SEPTIC DISPOSAL SYSTEM
RECORD LOCATION
BLUE HILL ROAD

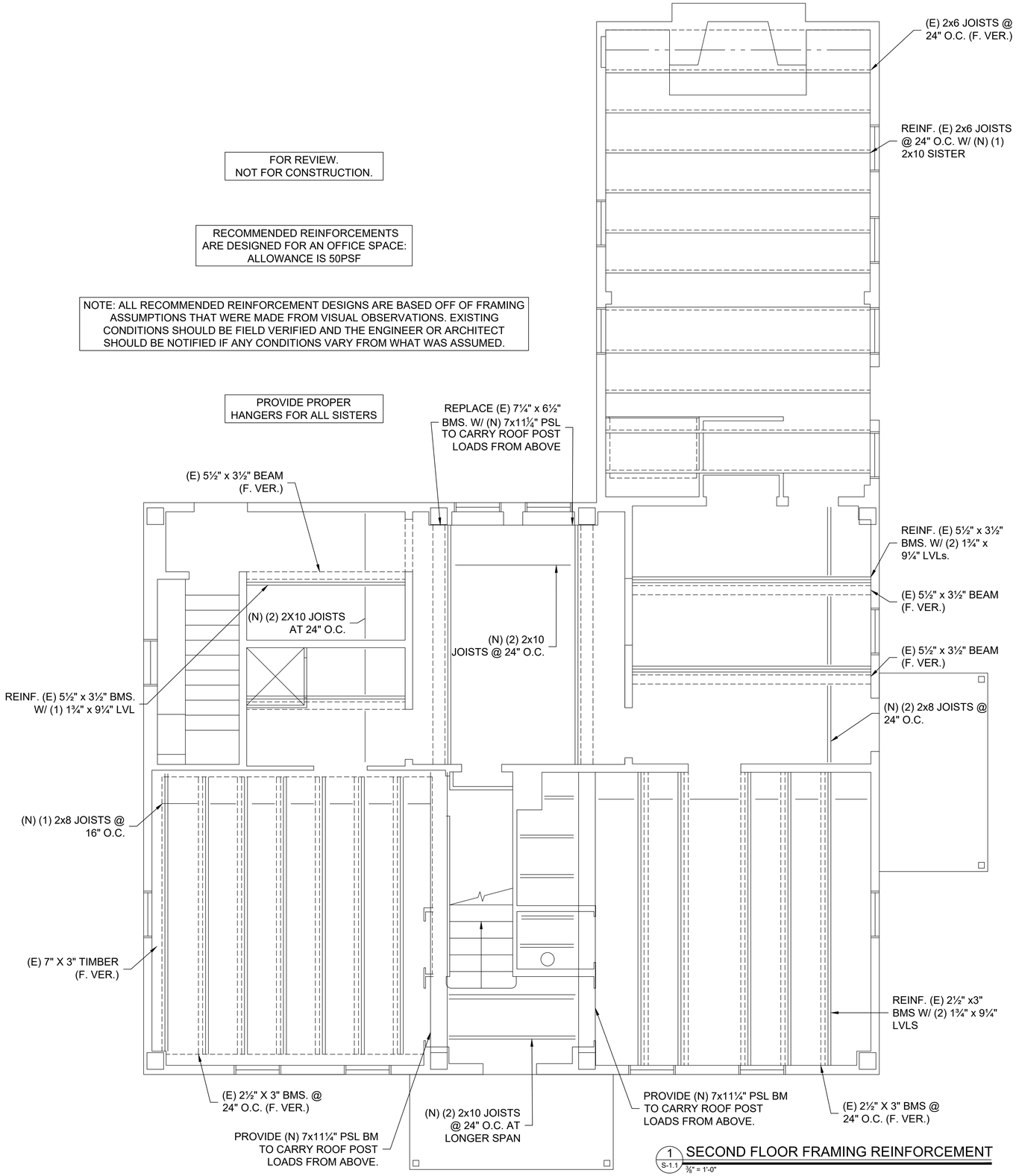
APPENDIX D:
FLOOR PLANS AND ELEVATIONS

FOR REVIEW.
NOT FOR CONSTRUCTION.

RECOMMENDED REINFORCEMENTS ARE DESIGNED FOR AN OFFICE SPACE: ALLOWANCE IS 50PSF

NOTE: ALL RECOMMENDED REINFORCEMENT DESIGNS ARE BASED OFF OF FRAMING ASSUMPTIONS THAT WERE MADE FROM VISUAL OBSERVATIONS. EXISTING CONDITIONS SHOULD BE FIELD VERIFIED AND THE ENGINEER OR ARCHITECT SHOULD BE NOTIFIED IF ANY CONDITIONS VARY FROM WHAT WAS ASSUMED.

PROVIDE PROPER HANGERS FOR ALL SISTERS



1 S-1.1 SECOND FLOOR FRAMING REINFORCEMENT
⅜" = 1'-0"

Structures North
CONSULTING ENGINEERS, INC.
60 Washington St., Suite 401
Salem, MA. 01970-3517
T 978.745.6817 I F 978.745.6067
www.structures-north.com

BEARTOWN STATE FOREST
OLD SUPERINTENDENT'S HOUSE
MONTEREY, MA

CLIENT NAME:

DATE: 11-4-2022
SCALE: AS NOTED
DRWN: JB
CHECKED BY: JWM

2ND FLOOR REINFORCEMENT

Drawing No:

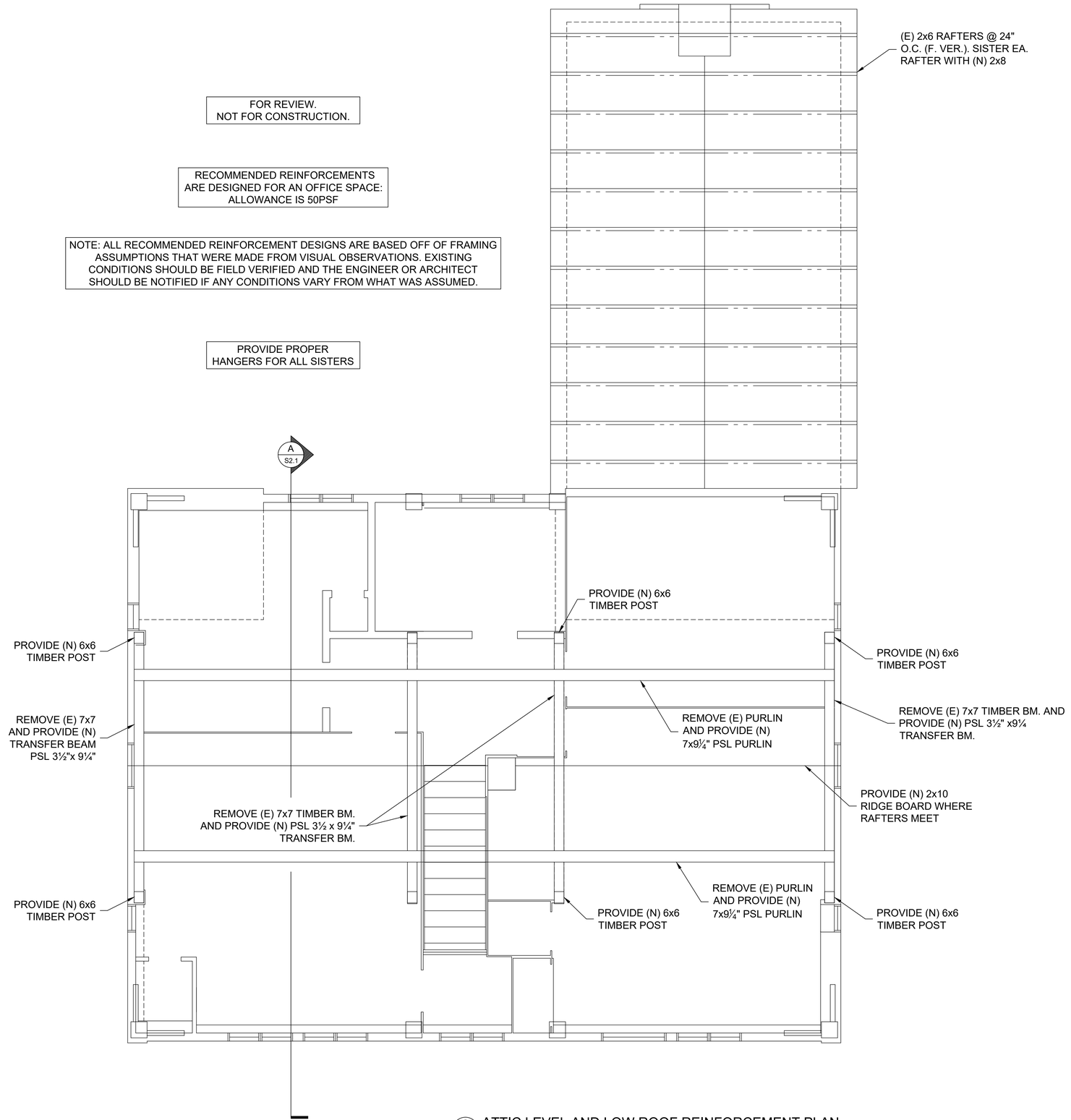
S-1.1

FOR REVIEW.
NOT FOR CONSTRUCTION.

RECOMMENDED REINFORCEMENTS ARE DESIGNED FOR AN OFFICE SPACE: ALLOWANCE IS 50PSF

NOTE: ALL RECOMMENDED REINFORCEMENT DESIGNS ARE BASED OFF OF FRAMING ASSUMPTIONS THAT WERE MADE FROM VISUAL OBSERVATIONS. EXISTING CONDITIONS SHOULD BE FIELD VERIFIED AND THE ENGINEER OR ARCHITECT SHOULD BE NOTIFIED IF ANY CONDITIONS VARY FROM WHAT WAS ASSUMED.

PROVIDE PROPER HANGERS FOR ALL SISTERS



2 S-1.2 ATTIC LEVEL AND LOW ROOF REINFORCEMENT PLAN
⅜" = 1'-0"

Structures North
CONSULTING ENGINEERS, INC.
60 Washington St., Suite 401
Salem, MA. 01970-3517
T 978.745.6817 I F 978.745.6067
www.structures-north.com

BEARTOWN STATE FOREST
OLD SUPERINTENDENT'S HOUSE
MONTEREY, MA

CLIENT NAME:

DATE: 11-4-2022
SCALE: AS NOTED
DRWN: JB
CHECKED BY: JWM

ATTIC & LOW ROOF REINFORCEMENT

Drawing No:

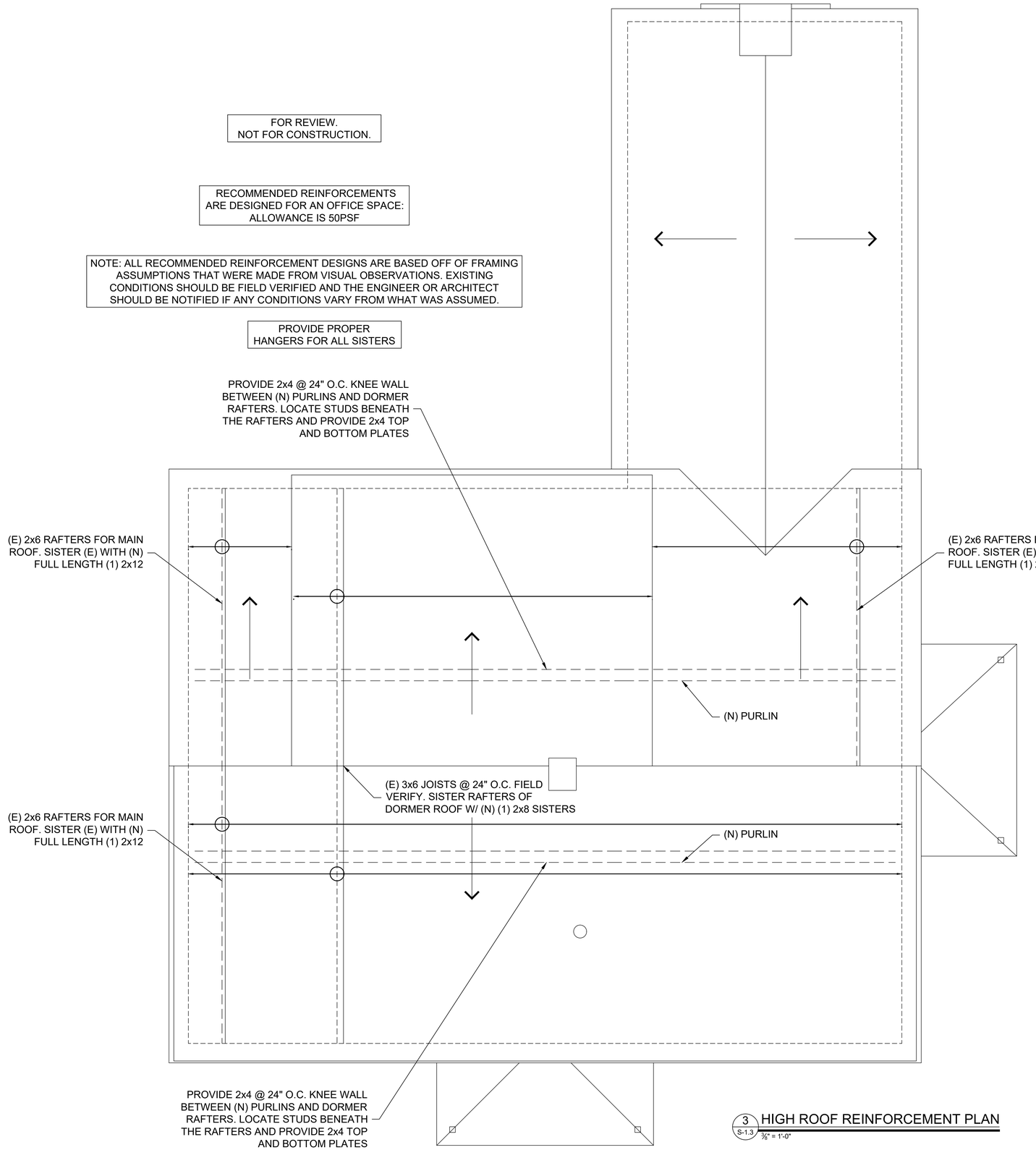
S-1.2

FOR REVIEW.
NOT FOR CONSTRUCTION.

RECOMMENDED REINFORCEMENTS ARE DESIGNED FOR AN OFFICE SPACE: ALLOWANCE IS 50PSF

NOTE: ALL RECOMMENDED REINFORCEMENT DESIGNS ARE BASED OFF OF FRAMING ASSUMPTIONS THAT WERE MADE FROM VISUAL OBSERVATIONS. EXISTING CONDITIONS SHOULD BE FIELD VERIFIED AND THE ENGINEER OR ARCHITECT SHOULD BE NOTIFIED IF ANY CONDITIONS VARY FROM WHAT WAS ASSUMED.

PROVIDE PROPER HANGERS FOR ALL SISTERS



3 / S-1.3 HIGH ROOF REINFORCEMENT PLAN
3/8" = 1'-0"

Structures North
CONSULTING ENGINEERS, INC.
60 Washington St., Suite 401
Salem, MA. 01970-3517
T 978.745.6817 I F 978.745.6067
www.structures-north.com

BEARTOWN STATE FOREST
OLD SUPERINTENDENT'S HOUSE
MONTEREY, MA

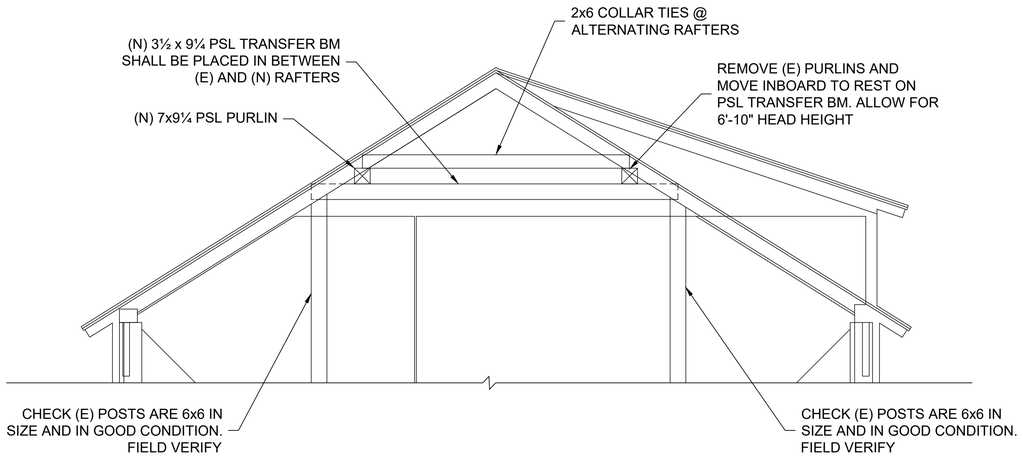
CLIENT NAME:

DATE: 11-4-2022
SCALE: AS NOTED
DRWN: JB
CHECKED BY: JWM

ATTIC & LOW ROOF REINFORCEMENT

Drawing No:

S-1.2



A / S-2.1 ATTIC LEVEL REINFORCEMENT SECTION

⅜" = 1'-0"

Structures North
CONSULTING ENGINEERS, INC.
60 Washington St., Suite 401
Salem, MA. 01970-3517
T 978.745.6817 I F 978.745.6067
www.structures-north.com

BEARTOWN STATE FOREST
OLD SUPERINTENDENT'S HOUSE
MONTEREY, MA

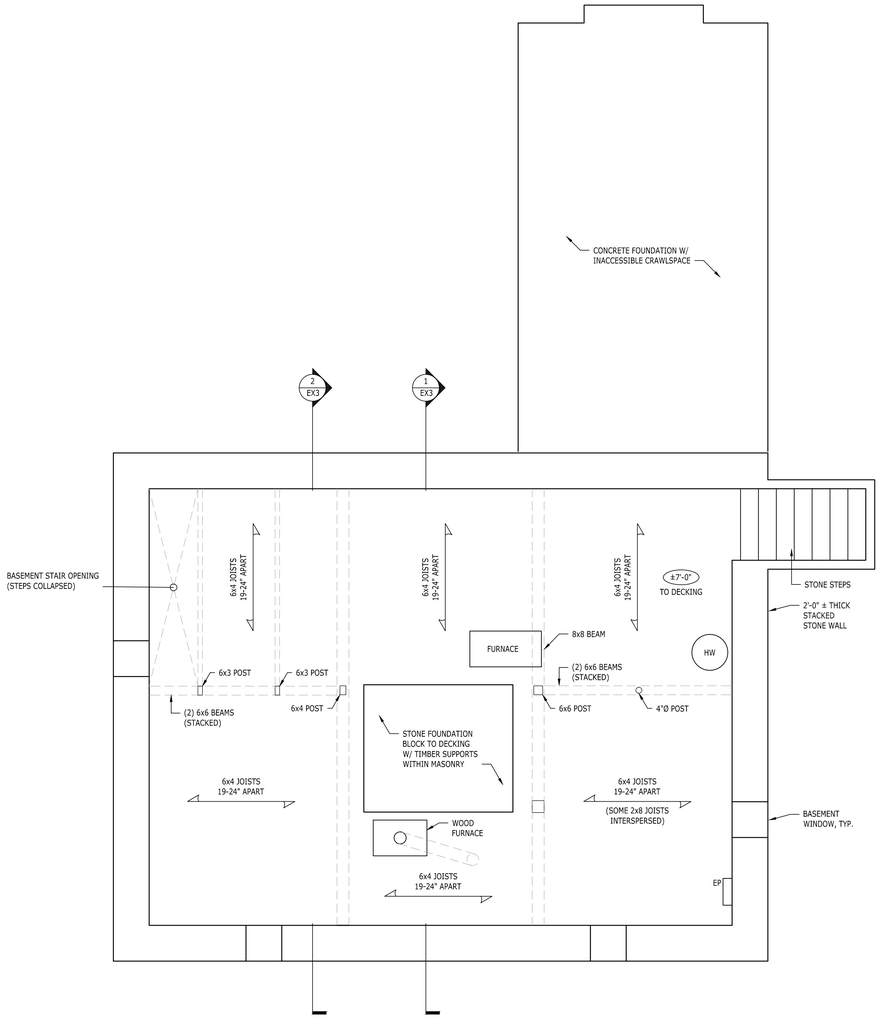
CLIENT NAME:

DATE: 11-4-2022
SCALE: AS NOTED
DRWN: JB
CHECKED BY: JWM

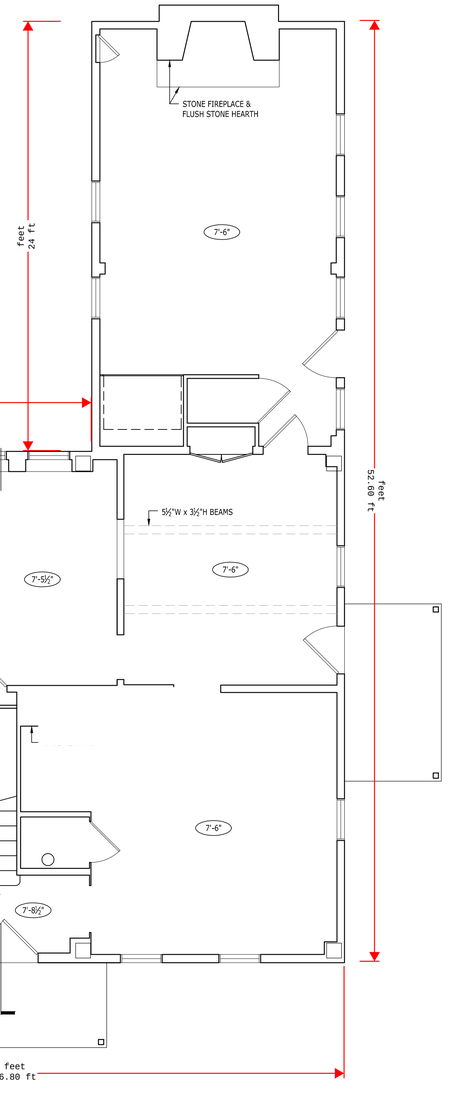
ATTIC SECTION

Drawing No:

S-2.1



1 EXISTING BASEMENT PLAN
1/4" = 1'-0"



2 EXISTING FIRST FLOOR PLAN
1/4" = 1'-0"

N

DATE	REMARKS
11/01/17	EXISTING

PROJECT

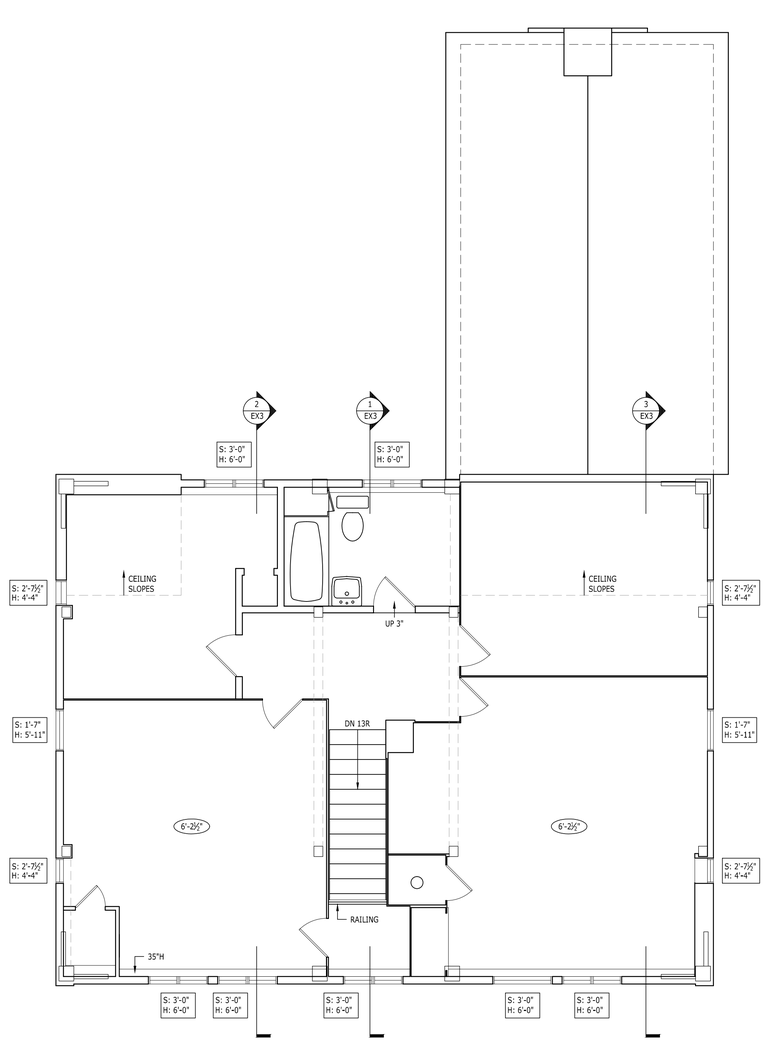
DCR–BEARTOWN STATE FORREST
SUPERINTENDENT'S HOUSE – EXISTING CONDITIONS
BLUE HILL ROAD, MONTEREY, MA

CLARK & GREEN, INC.
ARCHITECTURE + DESIGN

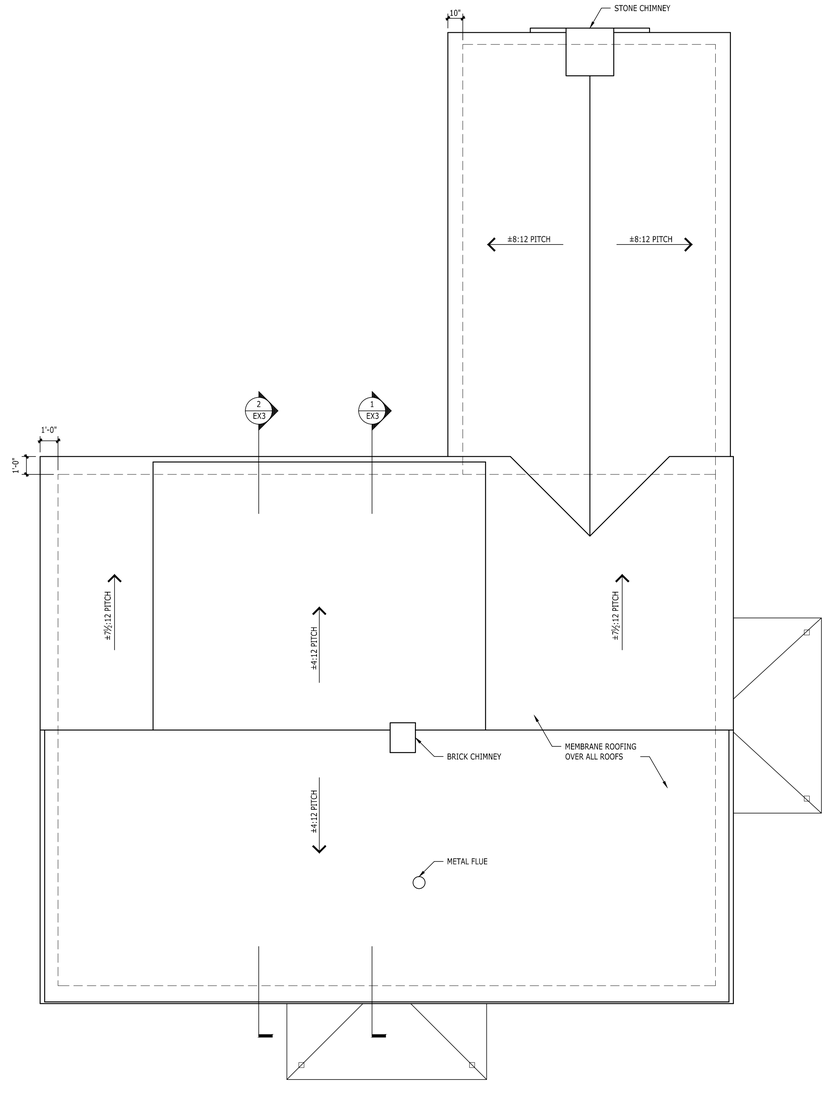
113 BRIDGE STREET
GREAT BARRINGTON MA 01230
413/528-5180 FAX 528-6420

SHEET TITLE
EXISTING
FLOOR PLANS

SHEET NUMBER
EX1



1 EXISTING SECOND FLOOR PLAN
1/4" = 1'-0"



2 EXISTING ROOF PLAN
1/4" = 1'-0"

N

DATE	REMARKS
11/01/17	EXISTING

PROJECT

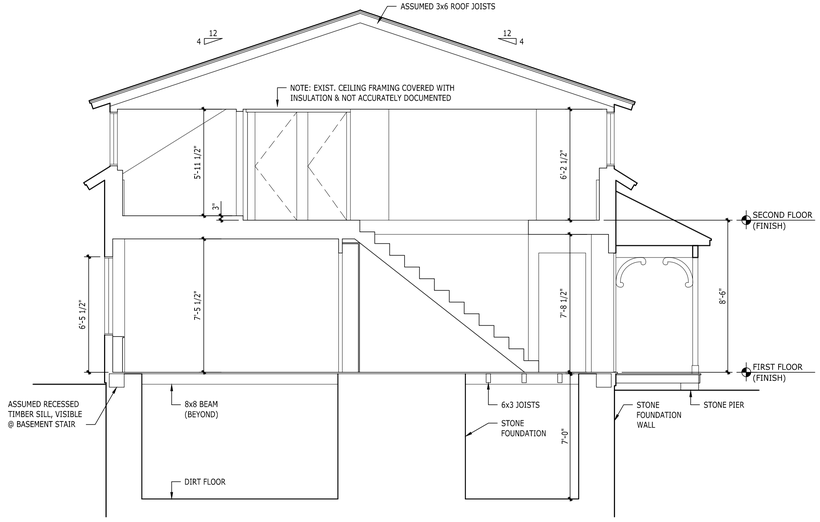
DCR–BEARTOWN STATE FORREST
SUPERINTENDENT'S HOUSE – EXISTING CONDITIONS
BLUE HILL ROAD, MONTEREY, MA

CLARK & GREEN, INC.
ARCHITECTURE + DESIGN

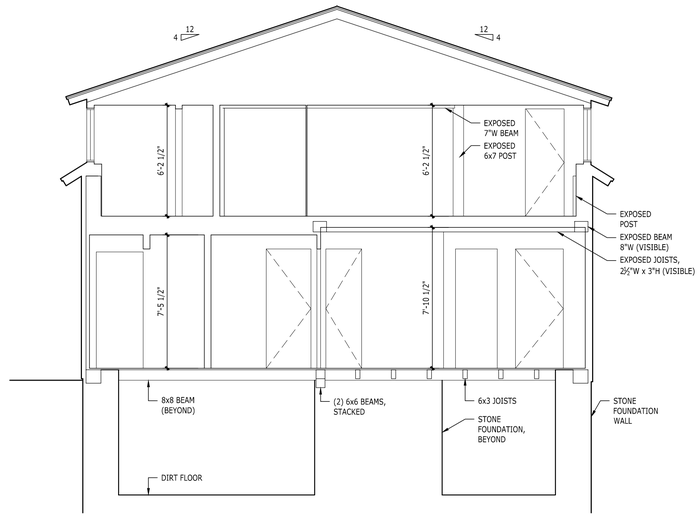
113 BRIDGE STREET
GREAT BARRINGTON MA 01230
413/528–5180 FAX 528–6420

SHEET TITLE
EXISTING
FLOOR PLANS

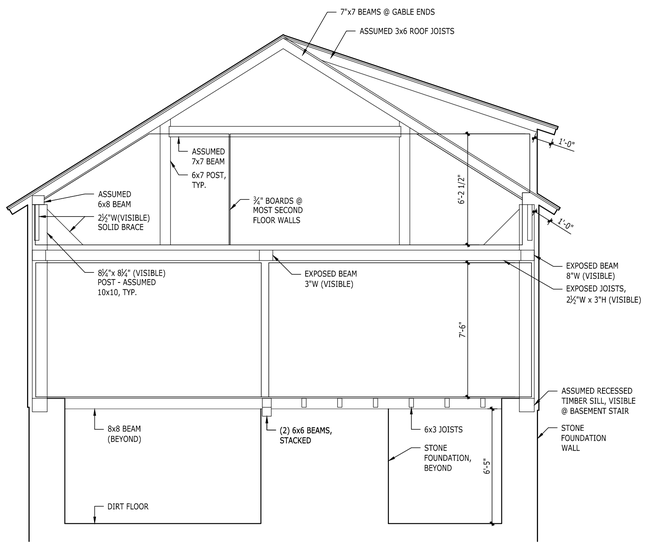
SHEET NUMBER
EX2



1 EXISTING BUILDING SECTION
1/4" = 1'-0"



2 EXISTING BUILDING SECTION
1/4" = 1'-0"



3 EXISTING BUILDING SECTION
1/4" = 1'-0"

DATE	REMARKS
11/01/17	EXISTING

PROJECT

DCR–BEARTOWN STATE FORREST
SUPERINTENDENT'S HOUSE – EXISTING CONDITIONS
BLUE HILL ROAD, MONTEREY, MA

CLARK & GREEN, INC.
ARCHITECTURE + DESIGN

113 BRIDGE STREET
GREAT BARRINGTON MA 01230
413/528–5180 FAX 528–6420

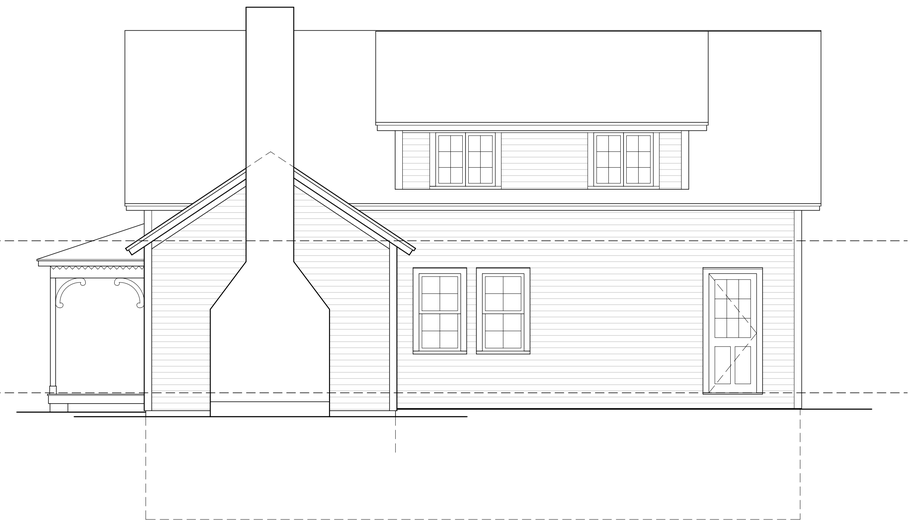
SHEET TITLE
EXISTING BUILDING SECTIONS

SHEET NUMBER
EX3

1 EXISTING NORTH ELEVATION
1/4" = 1'-0"

2 EXISTING WEST ELEVATION
1/4" = 1'-0"

3 EXISTING SOUTH ELEVATION
1/4" = 1'-0"



3 EXISTING EAST ELEVATION
1/4" = 1'-0"

DATE	REMARKS
11/01/17	EXISTING

PROJECT

DCR–BEARTOWN STATE FORREST
SUPERINTENDENT'S HOUSE – EXISTING CONDITIONS
BLUE HILL ROAD, MONTEREY, MA

CLARK & GREEN, INC.
ARCHITECTURE + DESIGN

113 BRIDGE STREET
GREAT BARRINGTON MA 01230
413/528–5180 FAX 528–6420

SHEET TITLE
EXISTING
BUILDING ELEVATIONS

SHEET NUMBER
EX4

APPENDIX E:
PRESERVATION STANDARDS AND CRITERIA

APPENDIX 9: Preservation Standards and Criteria

DCR requires that the exterior of the property be preserved in its existing architectural style. Interior space may be adaptively used, but remaining original detail is to be retained to the greatest extent possible. Preservation work and maintenance will be done by the Curator with plans, specifications and the work itself reviewed and approved by DCR, in consultation with the Massachusetts Historical Commission (MHC) and any other pertinent authority.

1. Historic Standards
The following general standards, as well as the *Secretary of the Interior's Standards for the Treatment of Historic Properties; 1992* (below) should govern the specific approach to preservation and use of the exterior and interior of the property:

a. Every reasonable attempt shall be made to provide for compatible uses that require minimal alterations.

b. The proposed uses of the property must maximize both immediate and long range preservation of the structure and its environment.

c. The distinguishing qualities and character of the property shall not be destroyed. Distinctive architectural and/or significant site features are not to be altered, and any historic material identified in the course of renovations is not to be removed from the building without the express approval of DCR.

d. All treatment that may affect surface or subsurface disturbances within the lease area must be evaluated by an archaeologist for potential effects to archaeological resources. If it is determined that an archaeological survey is necessary it should be conducted under permit from the state archaeologist at the Massachusetts Historical Commission in accordance with 950 CMR 70. Should artifacts be discovered in the course of the project, they should be investigated and recorded by an archaeologist permitted by the State Archaeologist, and turned over to the appropriate curatorial facility in accordance with Massachusetts General Laws, Chapter 9 Sec. 27c.

e. With regard to the interior of the property, DCR's preference is for historical fabric to be preserved. However, DCR is prepared to cooperate with a successful Proposer in developing an adaptive reuse program which insures the economic viability of the project while satisfying the Department's objective of preserving the property.

2. Construction Standards
DCR requires that all improvements to the property comply with the following codes and standards:

a. Massachusetts State Building Code (most recent edition);
b. State Plumbing Code;
c. DEP Title V;
d. Chapter 91;
e. all other applicable state and local codes, laws and regulations

All work shall be reviewed and by DCR. All work to the building and plumbing system is subject to review and approval by the State Building and Plumbing Inspectors. Electrical work is subject to the review and approval of the local electrical inspector. Septic system work is regulated by the Department of Environmental Protection, in consultation with the local Board of Health. Fire protection, safety and projects that impact watershed resources fall under the authority of local officials.

Secretary of the Interior's Standards for the Treatment of Historic Properties

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

APPENDIX F:
MAINTENANCE GUIDELINES

EXHIBIT F:

Guidelines for:

The Maintenance of Historic Properties

Including Recommendations for the Long Term Care of Historic Buildings and Landscapes

Commonwealth of Massachusetts
Department of Conservation and Recreation
Office of Cultural Resources

TABLE OF CONTENTS

FOREWORD

The Department of Conservation and Recreation (DCR), through the Office of Cultural Resources, has prepared the following:

STANDARDS FOR THE MAINTENANCE OF HISTORIC PROPERTIES

as a means to aid Curator/Tenants in the development of a long term maintenance plan for Historic Curatorship Program properties.

The purpose of these Maintenance Standards is to provide a means of evaluating the performance of the Curator/Tenant as well as to insure a high level of care and protection for these valuable historic resources.

The guidelines contained herein are meant to provide a broad-based philosophy of maintenance, applicable to all historic properties. However, the Department acknowledges that Curatorship properties vary in size and condition, with some properties requiring specialized attention to landscape and architectural details. Therefore, it is DCR's goal to work with each Curator/Tenant in setting annual priorities for individual properties in order to both preserve the character of the property and minimize future expenditures.

The Department intends to work cooperatively with the Curator/Tenant in overseeing the condition of the Curatorship property. The result of a well-developed maintenance plan will be the extended life of a historically significant property, lowered costs for the Curator/Tenant and the public benefit of a well-maintained, attractive property. The Department looks forward to working with Curator/Tenants towards the common goal of the preservation of the Commonwealth's historic properties.

PART I - BACKGROUND

A. Department of Conservation and Recreation

The Department of Conservation and Recreation (DCR) is an agency of the Commonwealth of Massachusetts. It is charged with overseeing and implementing a wide variety of statutory mandates relating to conservation and outdoor recreation. These include "control and supervision of such parks, forests and areas of recreational, scenic, or historic significance as may be from time to time committed to it." [Mass.General Laws, Ch. 21, §1]

B. Mission Statement

The mission of the Department of Conservation and Recreation is to exercise care and oversight of the natural, cultural and historic resources of the Commonwealth and to provide quality public recreation opportunities which are environmentally sound, affordable and accessible to all citizens.

To carry out its mission, DCR investigates, analyzes, promotes and demonstrates the wise stewardship of the Commonwealth's natural, cultural and historic resources; develops and maintains public access to such resources in the rural, suburban and urban areas of the Commonwealth; provides public recreation and education programs; and manages, protects and conserves all public lands, waters and facilities that have been entrusted to the care of the Department, for this and future generations.

C. The Massachusetts State Parks System

Beginning in 1898 with the establishment of Mt. Greylock State Reservation, the Commonwealth of Massachusetts has created an extensive system of State Parks and Forests. This system totals over 270,000 acres in over 160 distinct management units. It is under the control and supervision of the Department of Conservation and Recreation (DCR). Day to day management and operation of DCR properties is the responsibility of the Department's Division of State Parks.

D. Historic Curatorship Program

The Historic Curatorship Program, administered by DCR's Office of Cultural Resources, is a leasing program for historic properties located within the Massachusetts State Parks System. The primary goal of the Historic Curatorship Program is to obtain the rehabilitation and maintenance of historic state park properties in exchange for a long term lease.

PART II - METHODOLOGY

A. Purpose

The purpose of this document is to describe the maintenance requirements of the Historic Curatorship Program and to provide the Curator/Tenant with guidelines for the maintenance of historic properties in the Program.

The following guidelines are general maintenance standards required under a Curatorship lease. However, many Historic Curatorship Program properties include historic landscape elements which are character defining features of the property. In such cases, significant elements will be identified by DCR, and specific maintenance treatments will be developed with the Curator/Tenant.

B. Annual vs. Cyclical Property Maintenance

There are two categories of property maintenance: annual and cyclical. Since climate, weather conditions and other variables can affect the lifespan of materials, both annual and cyclical maintenance are essential to the proper upkeep of a historic building or landscape. Annual and cyclical maintenance can be defined as follows:

Annual maintenance is a regular, repeated action, usually performed every year and serves as a preventative measure. In a building, the cleaning of the roof gutters and downspouts would be examples of annual maintenance. In a landscape, mowing the lawn or raking leaves would be categorized as annual maintenance. A well-developed annual maintenance plan can extend the longevity of building materials, preventing costly future repairs.

Cyclical maintenance is a less frequent schedule of repair and replacement with a varied timetable, depending on the material in question. Installation of a new roof would be considered cyclical, since it occurs every 15 to 20 years. In a landscape, the rejuvenation of a plant bed or the resetting of stone steps is cyclical maintenance. Since cyclical maintenance can be more expensive than annual maintenance, Curator/Tenants should anticipate cyclical needs and plan accordingly. Appendix C of these guidelines lists the average lifespans for some common building materials.

C. Goals of Proper Maintenance

1. Benefits to the Curator/Tenant:

    a. Cost savings - Annual and cyclic maintenance of a property can prevent more serious and costly deterioration.
    b. Visual Character - If a property is regularly maintained it will look well-kept and attractive and inviting.
    c. Energy Efficiency - Regular work on securing windows, doors and chimneys as well as placement of insulation insure tighter, more energy efficient buildings. Such efficiency results in annual cost savings for building heat as well as making the building more livable.
    d. Public Safety - Regular and cyclical maintenance insures that buildings are kept up to current building codes and less likely to encourage fires, plumbing leaks and structural failures. Built forms within the landscape also need to be attended to in order to avoid structural failures, earth movement or other problems.
    e. Environmental Protection - Failed septic systems, well contamination, underground fuel storage tank leaks, over use of pesticides and herbicides and other forms of environmental degradation can be avoided if tested, checked and/or inspected on a regular basis.

2. Benefits to the Commonwealth:

    a. Compatibility with Public Open Space - Over the years DCR has acquired land for public use and has maintained these properties to a high standard. A comprehensive maintenance plan for a Historic Curatorship property will enhance the appearance of the DCR facility and promote the goals of the facility management plan.
    b. Preservation of Historically Significant Property -Almost all of the Historic Curatorship properties are eligible for nomination to the National Register of

Historic Places. Each property - building and landscape - is a significant physical reminder of the past. With proper maintenance they will be preserved for many generations to come.

c. Public benefit - Historic Curatorship properties will be open to the public at least twice each year, some more frequently. Regular maintenance of the property will add to the public enjoyment of the historic site.

PART III - MAINTENANCE STANDARDS

In order to keep the Historic Curatorship Program properties - both buildings and their settings - in good, operable condition, the following minimum standards shall apply:

A. Building Exteriors

Buildings shall be kept tight to the weather by installation of watertight roofing, protective paint coatings, proper drainage systems and other means by which water is prevented from penetrating into the building. Foundation plantings shall be pruned in order to prevent excessive moisture against the buildings.

B. Building Interior

Interiors shall be kept clean and dry. To the greatest extent possible, interior plaster and wood finishes shall be protected from insect infestation, condensation and water penetration.

C. Building Structure

Buildings shall be kept dry, structurally sound and in good repair. While under structural repair, buildings shall be stabilized and properly protected to prevent further damage to the building or to persons performing or observing the work in progress. All building repairs shall comply with all applicable state and/or local building codes. In the event repairs and/or restoration cannot occur immediately, the building shall be stabilized, in accordance with recognized preservation standards, in order to prevent further deterioration.

D. Building Systems

All building systems (plumbing, heating, air conditioning, electrical, smoke detector, fire suppression, security alarm systems and other building systems) shall be kept operable and in good repair and shall comply with applicable state and/or local building codes. The Curator/Tenant shall take every measure to prevent water leaks and resultant damage, electrical shocks or failure, and other similar damage that may result from the failure of a building system.

E. Grounds

The Curator/Tenant shall keep the grounds around the buildings in good condition. Grounds shall be free of litter or debris, clear of clutter and, generally, shall be kept neatly and attractively. The Historic Curatorship Program property shall be kept in accordance with the standards and goals established by the park or reservation management plan, including mowing schedules and historic landscape management. Where applicable, the Curator/Tenant shall maintain the landscaped areas of the property in accordance with recognized standards for maintenance of historically-significant landscapes. The Curator/Tenant shall exercise every effort to protect, stabilize and maintain significant landscape features for interpretation and/or restoration. Missing or deteriorated landscape elements will be replaced, in kind.

F. Environmental Hazards

All Historic Curatorship Program properties shall be kept free of environmental contaminants or hazards including, but not limited to, unregistered vehicles, unused/antiquated agricultural machinery or vehicles or parts thereof, automotive lubricants, hazardous and/or toxic materials, used tires, tree stumps, road salts and other potential contaminants to the ground.
The Curator/Tenant shall keep all buildings free of destructive rodents and other animals or pests that may cause damage to the property. If applicable, the Curator/Tenant shall maintain a septic system in compliance with the State of Massachusetts Sanitary Code (Title V) and shall maintain a potable water supply in accordance with State and local standards.

G. Sanitation

Properties shall be kept clean and free of litter and debris. Trash and other wastes shall be removed on a regular basis. If the permitted uses of a property include the keeping of domestic or farm animals the Curator/Tenant shall remove animal wastes on a regular basis. The composting of organic wastes shall comply with all local health and safety regulations. Compost piles shall be located in areas approved by DCR.

H. Permitting

The Curator/Tenant will be responsible for obtaining all necessary permits and approvals for work on the Curatorship property. Special resources such as wetlands and archaeological sites contained within the Curatorship property will be identified.

PART IV - REVIEW & INSPECTION

A. Review

Cyclical maintenance of the Curatorship property may involve major changes to the building or landscape. Replacement of or significant repair to historic fabric, including landscape elements, will require DCR approval. In some cases, DCR will file a Project Notification Form (PNF) with the Massachusetts Historical Commission (MHC), as required under law. MHC must approve the project within 30 days in order for the work to proceed.

B. Inspection

Each year a DCR representative will inspect the property with the Curator/Tenant. Using the checklist found in Appendix A as a general reference, DCR will evaluate the condition of the property and the performance of the Curator/Tenant. A Curator/Tenant will be eligible for the credit if all of the requirements of the "Maintenance Services," as outlined in the Lease agreement, have been met.

PART V: APPENDICES

EXAMPLE CHECKLIST

APPENDIX A: Annual Maintenance Inspection Checklist

Property Name:
Date of Inspection:
Value of Annual Maintenance Credit:
Curator / Tenant(s) present:
DCR Representative(s) present:

				I. BUILDING EXTERIOR
				A. Roof Structure and Materials
yes	no	n/a		
☐	☐	☐		1. Are there any missing, broken, or damaged roof slates or shingles?
☐	☐	☐		2. Are wooden shingles splitting and/or curling?
☐	☐	☐		3. Are slates cracked?
☐	☐	☐		4. Are there any signs of rusting?
☐	☐	☐		5. Are there any indications of standing water, water back-up or other water damage? (Example: damage from ice dams, damaged or missing gutters)
☐	☐	☐		6. Does any part of the roof sag or look out of alignment?
☐	☐	☐		7. Is there any damage to the cornice, soffits or fascia boards?
☐	☐	☐		8. Are there loose, rotten or missing gutters?
☐	☐	☐		9. Is the paint on the gutters peeling from the gutter?
☐	☐	☐		10. Do the gutters need to be cleaned and oiled with linseed oil?
☐	☐	☐		11. Do the downspouts need to be adjusted and connected with the gutter?
☐	☐	☐		12. Does the water from the downspouts need to be directed away from the house?
☐	☐	☐		13. Does the house need splash pads?
☐	☐	☐		14. Does the water collect near the foundation?
				Comments:
				B. Chimneys (from roof line up)
☐	☐	☐		1. Are the chimney flashings unsecured from either the roof or the chimney?
☐	☐	☐		2. Is the masonry cracked or crumbling?
☐	☐	☐		3. Are bricks and/or pargeting cracked or missing?
☐	☐	☐		4. Is the chimney leaning more than a few degrees?
☐	☐	☐		5. Is there bracing on the chimney?
☐	☐	☐		6. Are the chimneys in need of cleaning?
				Comments:
				C. Exterior Walls
☐	☐	☐		I. Are the walls warped or bulging?
☐	☐	☐		2. Are doors and windows misaligned with their frames or operating

				improperly?
yes	no	n/a		
☐	☐	☐		3. Are there signs of settlement around the doors and windows?
☐	☐	☐		4. Is the exterior siding placed on the building inproperly?
☐	☐	☐		5. If wooden ext walls, does the exterior siding undulate, buckle or curl?
☐	☐	☐		6. If brick or masonry walls, are mortarjoints spalled, washed out or broken?
				Comments:
				D. Exterior Woodwork
☐	☐	☐		1. Is the woodwork less than 6”-8” from the ground?
☐	☐	☐		2. Do probes into the wood indicate more than a ¼ “penetration?
☐	☐	☐		3. Is there any rotted or splitting wood?
☐	☐	☐		4. Are there any signs of dirt (in the form of termite mud tunnels) on foundations, steps and cellar walls?
☐	☐	☐		5. Are there any signs of insect boring, such as holes, sawdust, wood penetration, or other indicators?
☐	☐	☐		6. Are vines and other vegetation located close to the house, thus keeping moisture close to the house and inviting insect damage and rot?
				Comments:
				E. Exterior Trim and Finishes
☐	☐	☐		1. Are there any clapboards or sheathing materials missing from the exterior?
☐	☐	☐		2. Are there any loose, cracked or damaged clapboards or sheathing materials?
☐	☐	☐		3. Are sheathing materials improperly attached to the wall?
☐	☐	☐		4. If aluminum, vinyl or asbestos siding is over the original sheathing, is artificial siding cracking, buckling or splitting, etc.? Does the siding prevent the building from breathing?
☐	☐	☐		5. Is decorative woodwork improperly secured to the house?
☐	☐	☐		6. Do decorative features, windows, door frames and other areas need to be caulked and painted?
☐	☐	☐		7. Is paint peeling, flaking or blistering? (If so, check for moisture in the walls and presence of a vapor barrier)
☐	☐	☐		8. Do any joint areas require caulking or flashing to prevent moisture penetration
☐	☐	☐		9. Does the surface contain mildew, chalking or other paint surface reaction?
				Comments:
				F. Doors and Windows
☐	☐	☐		I. Are doors and windows improperly fitted in their openings?
☐	☐	☐		2. Is the glass cracked, loose or improperly glazed or painted?
☐	☐	☐		3. Is there any rotted wood in the sills or lower rails?
☐	☐	☐		4. Is weather stripping failing?
☐	☐	☐		5. Are exterior storm windows and doors uninstalled?

☐	☐	☐		6. If exterior storm windows are not feasible for historic or technical reasons, are interior storm windows installed?
yes	no	n/a		
				Comments:
				G. Foundation and Masonry
☐	☐	☐		1. Is water collecting at the foundation walls?
☐	☐	☐		2. Is the foundation or masonry cracked or crumbling?
☐	☐	☐		3. Are bricks, stone and/or parging cracked or missing?
☐	☐	☐		4. Is the mortar eroding or loosening?
☐	☐	☐		5. Are there serious signs of building settlement (ie., more than hairline cracks in the masonry)?
☐	☐	☐		6. Is there spalling, cracking or crumbling of stone trim? (Example: if there is brownstone, is it flaking?)
☐	☐	☐		7. Are there any signs (bulges, cracks, etc.) of separation of brick courses?
				Comments:
				II. BUILDING INTERIOR
				A. Cellar/Basement
☐	☐	☐		1. Is the basement inadequately ventilated?
☐	☐	☐		2. Does the basement small damp and moldy?
☐	☐	☐		3. Do sills or joists show signs or termite or insect damage? (Probe wood to determine extent of damage)
☐	☐	☐		4. Are there any signs of building sagging or deflection? (If so, check for weakened support posts, rotten beams, etc.)
☐	☐	☐		5. Are there any signs (wood dust, holes, active insects) of weakened or damaged floor joists or beams, flooring or other wooden members?
☐	☐	☐		6. Are there indications of leaking pipes — water pipes, pumps or wells, waste pipe failure, etc.?
☐	☐	☐		7. Is there any flooding in the basement?
☐	☐	☐		8. Is the bulkhead unsecured or improperly flashed and caulked?
☐	☐	☐		9. If there is a crawl space, is it opening and allowing moisture to enter the house?
☐	☐	☐		10. Is the foundation mortar separating from the masonry foundation or cracking?
☐	☐	☐		Comments:
				B. Finished Spaces
☐	☐	☐		1. Are there any signs of damp plaster on ceilings, walls, around chimneys, under kitchen or bathrooms, or in other applicable locations?
☐	☐	☐		2. Is there any vibration or “bounce” to the staircase or other floor area of the house, indicating potential structural problems?
☐	☐	☐		3. Do floors sag or vibrate when there is a lot of foot traffic or jumping?
☐	☐	☐		4. Are there prominent cracks in walls, floors or near window or

				door casings which indicate settlement?
yes	no	n/a		
☐	☐	☐		5. Are these cracks old or recently created?
				Comments:
				C. Insulation and Ventilation
☐	☐	☐		1. Are the exterior walls uninsulated? If not, what insulating material is used, and was a vapor barrier installed?
☐	☐	☐		2. Is attic insulation improperly installed?
☐	☐	☐		3. Does the attic insulation restrict adequate ventilation?
				Comments:
				D. Attic
☐	☐	☐		1. Are there any signs of leaks (staining) on the attic rafters or sheathing?
☐	☐	☐		2. Is the attic improperly ventilated, causing moisture and mildew to collect on the underside of the roof?
☐	☐	☐		3. Are there any sagging rafters, broken collar ties or other structural deficiencies?
☐	☐	☐		4. Are the chimney bricks in the attic loose or in bad condition?
☐	☐	☐		5. Are there any holes in the chimney or indication that there is a failure of the present chimney flue to contain the heat generated from the heating system and/or fireplaces?
☐	☐	☐		6. Is there any evidence of insect infestation (sawdust, borings, etc.) in wooden members (rafters, purlins or sheathing)?
				Comments:
				III. BUILDING SYSTEMS
				A. Water Systems and Plumbing
☐	☐	☐		1. Is water pressure inadequate?
☐	☐	☐		2. If a private well, is the pump malfunctioning?
☐	☐	☐		3. If a private well are there any issues with the drinking water quality?
☐	☐	☐		4. Are there any leaks in the water lines?
☐	☐	☐		5. Are the kitchen and bathroom fixtures improperly installed, causing leaks, “sweating”, or other water damage?
				Comments:
				B. Heating System
☐	☐	☐		1. Is the heating system malfunctioning?
				C. Sewage/Septic Systems
☐	☐	☐		1. Are there odors emanating from the septic tank/field or sewage line area?
☐	☐	☐		2. If a septic system, are there any depressions or “wet spots” in the ground area adjacent to or within the septic field?
☐	☐	☐		3. Does the septic tank need pumping?

				Comments:
yes	no	n/a		
				D. Natural Gas Systems
☐	☐	☐		1. Are there any natural gas/propane odors emanating from the system?
☐	☐	☐		2. If a propane tank is located on the property, is it improperly secured?
				Comments:
				E. Electrical Systems
☐	☐	☐		1. Are overhead electrical lines coming into the property disconnected or uncovered?
☐	☐	☐		2. Are poles supporting the wires too close to tree limbs and other encumbrances?
☐	☐	☐		3. Does the present amperage violate the Mass. Building Code and/or local building code?
☐	☐	☐		4. Have any major electrical appliances been added to the system within the last year?
☐	☐	☐		5. Do any lights or electrical utilities fail when turned on?
☐	☐	☐		6. Do bathroom, laundry room and kitchen electrical systems need ground fault outlets?
☐	☐	☐		7. Beyond regional electric systems failures, have there been any electrical failures, “black outs”, or other problems system within the last year?
☐	☐	☐		8. Are any electrical lines located close to water sources?
☐	☐	☐		9. Are any outside electrical plugs and lights exposed to weather damage?
				Comments:
				F. Telephone/Cable System
☐	☐	☐		1. Are the overhead telephone lines coming into the property loose or disconnected?
☐	☐	☐		2. Are poles supporting the wires too close to tree limbs or other encumbrances?
				Comments:
				G. Fire/Security Systems
☐	☐	☐		I. If there is a fire suppression system, is it due for an annual check up?
☐	☐	☐		2. If there is a home security system, is it due for an annual check up?
				Comments:
				IV. WALKWAY AND DRIVEWAY MAINTENANCE
☐	☐	☐		1. Are the walks and driveway surfaces in bad condition, with any uneven or cracked surfaces?
☐	☐	☐		2. If gravel, stone or brick paths, are any materials missing and is infill material needed to supplement existing way?

☐	☐	☐		3. If an asphalt material, does surface need a seal coat?
				Comments:
yes	no	n/a		
				V. MISCELLANEOUS PROVISIONS
☐	☐	☐		I. Are there any systems and/or property features that warrant special maintenance considerations and/or unique treatment? If so, what are they and what special provisions need to be made?
☐	☐	☐		2. Are trash containers securely covered to prevent animals from getting in?
☐	☐	☐		3. Are trash containers left in the street after trash pickup?
☐	☐	☐		4. Where waste collection is not available, is no more than two weeks worth of waste collected located on the site?
☐	☐	☐		5. Are recycling materials uncovered?
☐	☐	☐		6. Is more than a month's worth of recycled materials located on the site?
☐	☐	☐		7. Are ladders, building materials and other construction-related equipment properly secured to limit theft and insurance liability?
☐	☐	☐		8. Are boats, mobile homes, trailers, recreational vehicles, etc., in plain view?
☐	☐	☐		9. Is the yard littered with children's toys, bicycles, plant pots, garden tools, barbecue grill and other items?
☐	☐	☐		10. Is the outside laundry line screened in plain view?
				Comments:
				VI. COMPLIANCE AND COMPATIBILITY
☐	☐	☐		1. Is the overall appearance of the Curatorship site incompatible with the conservation and recreation goals of DCR, as well as with those of the facility management plan?
☐	☐	☐		2. Has the Curator/Tenant failed to comply with the reporting requirements of the lease agreement?
				Comments:
				VII. REMINDERS
☐	☐	☐		1. Are there any unpaid taxes on the property?
☐	☐	☐		2. Is the insurance coverage inadequate or out of date?
☐	☐	☐		3. Do we need a copy for the file?
☐	☐	☐		4. Are any utility services out of date?
				comments:

APPENDIX B: Annual Building and Landscape Quick Checks

3 MONTH INSPECTION
[ ] Inspect yard to see that it is properly maintained/picked up
[ ] Check foundation plantings for moisture retention
[ ] Check roof for debris
[ ] Clean downspouts and gutters. Oil gutters
[ ] Check fuse box for proper operation and amperage of fuses
[ ] Inspection of yard
[ ] Mow lawn regularly (April-November)
[ ] Weed/water lawn and planting beds (April-November)
[ ] Mulch (seasonal)
[ ] Check irrigation systems

6 MONTH INSPECTION
[ ] Inspect foundation for movement, spalling or other damage
[ ] Inspect and treat for insect damage and/or nests
[ ] Check for any structural deficiencies in wooden members
[ ] Inspect joint areas for caulking and flashing
[ ] Check condition of exterior paint
[ ] Check condition and energy efficiency of doors, windows and bulkhead
[ ] Check gas/propane system for leaks and proper connection to structure
[ ] Inspect electrical lines to determine if they are free of obstructions
[ ] Inspect interior electrical systems for proper operation
[ ] Test fire suppression system for proper operation
[ ] Test security alarm system for proper operation
[ ] Apply fertilizers, lime and herbicides to lawns and plants (as needed)
[ ] Apply soil nutrients (as needed)
[ ] Rake leaves, general yard clean up (seasonal)
[ ] Aerate Lawn
[ ] Replace plant materials (spring and fall for trees and shrubs)
[ ] Prune trees and shrubs (spring and fall)
[ ] Clear paths and trails
[ ] Mow meadow (once per year or as needed)
[ ] Spray fruit trees
[ ] Divide perennials

9 MONTH INSPECTION
[ ] Check exterior walls for bulges, settlement, and curling clapboards
[ ] Check condition of exterior woodwork (trim, cornerboards, posts,ballustrades)
[ ] Review plumbing system for leaks, "sweating" and general operation
[ ] Inspect telephone lines to determine if they are free of obstructions
[ ] Protect garden furnishings (paint as needed)
[ ] Inspect driveway and drainage systems

12 MONTH INSPECTION
[ ] Inspect roof for leaks, shingle/slate coverage, structural changes, proper ventilation
[ ] Clean heating system (ducts and vents)
[ ] Inspect and clean himney
[ ] Check insulation materials and vapor barriers

[ ] Inspect septic system for proper operation and/or pumping
[ ] Inspect driveways and walkways
[ ] Test private well water per State and Local regulations
[ ] Test soils for Ph and other factors (add supplements as needed)
[ ] Clean drainage structures
[ ] Repoint masonry on garden structures (as needed)

Cyclical Building and Landscape Milestones

2-5 YEAR TASKS
[] Apply fungicide treatment to wooden roof shingles.
[] Check roof air circulation
[] Repair windows and doors for damage and energy efficiency
[] Check and clear property storm drainage system
[] Install basement vapor barrier (as needed)
[] Add insulation to walls, basement ceiling and attic (as needed)
[] Check house for proper ventilation - basement, attic and living area
[] Pump septic system (every two years or more as necessary)
[] Replace/supplement path materials
[] Drain and clean ornamental pool
[] Remove invasive plant material from natural pond
[] Stabilize stone walls
[] Stabilize garden structures
[] Replace lawnmower blades

5-10 YEAR TASKS
[] Repoint chimneys and foundations, add related flashings (as needed)
[] Paint interior walls, trim and ceilings
[] Paint exterior siding, trim and windows
[] Replace gas meter (every 7 years)
[] Replace hot water tank (every 5-10 years)
[] Rejuvenate plant beds (as needed)
[] Replace/stabilize driveway materials

11-15 YEAR TASKS
[] Replace linoleum and similar flooring materials
[] Refinish wood floors (as needed)
[] Repair or replace private well pump
[] Replace gas dryer
[] Replace propane tank
[] Replace/repair garden water system
[] Replace/Repair wooden fencing and posts

16-20 YEAR TASKS
[] Replace roofing materials and wooden sheathing as necessary
[] Replace synthetic (vinyl, aluminum, etc.) as needed
[] Replant lawn area (as needed)

21-30 YEAR TASKS
[] Replace wooden clapboard, trim and/or decorative elements (as needed)
[] Repoint masonry (as needed)
[] Repair cracks from structural settlement (as needed)
[] Replace gas boiler
[] Replace gas or electric stove
[] Replace water lines to property

APPENDIX C: Average Lifespan of Some Common Building Materials

I.BUILDING EXTERIOR

A. Roof
Asphalt Shingles.....20-25 years
Slate/Tile.....60-80 year
Wooden Shingle..... 20-30 years
Metal.....20-30 years

B. Chimneys
Brick/Stone.....10-15 years (repoint)
Clapboard or Metal cover.....15-20 years
Clay Flue Liner.....75 years

C. Masonry Foundation.....10 years (repoint)

D. Exterior Walls
Wooden Clapboard.....25 years
Wooden Shingles.....40 years
Paint.....5-7 years
Brick, stone, concrete block.....25 years (repoint)
Synthetic siding (aluminum, vinyl).....20-30 years

E. Exterior Woodwork.....Indefinitely (with proper maintenance)

II.BUILDING INTERIOR

A. Finishes
Paint, varnish and wallpaper.....7-10 years
Wood Flooring.....5-10 years (refinish)
Linoleum.....10-15 years

B. Building Systems
1. Plumbing
Lead pipes.....replace immediately
water meter.....7-10 years
well pump.....10-20 years
fixtures.....varies
septic.....pump every 5 years

2. Heating system
Gas meter.....7 years
Boiler.....15-20 years (repair @ 10 yrs)
Hot Water Tank.....5-10 years
Dryer.....10-15 years
Oil Tank.....25-30 years (inspect @ 5 yrs)

3. Electrical System.....50 years
pull cords.....5 years

switch plates and outlets.....15 years
lighting fixtures.....20 years
electric heat pump.....20-25 years (repair @ 10 yrs)
baseboard wiring.....2-5 years (repair)

4. Telephone Cable.....50 years (repair @ 10 yrs)

5. Insulation (Check for settlement) .....2 years

6. Life Safety Systems
Smoke detectors.....15 years
Home Security System(repair).....10 years

APPENDIX G:
HISTORIC CURATORSHIP ENABLING LEGISLATION

DCR Historic Curatorship Program Enabling Legislation and Amendments
(As amended through 2018)

Section 44, Chapter 85, Acts of 1994

SECTION 44. Notwithstanding the provisions of any general or special law to the contrary, the department of environmental management may, consistent with established procedures of the division of capital planning and operations, and as provided herein, lease real property under its control and supervision to any person or organization, if the commissioner of said department makes a determination that such lease will adequately ensure the preservation and maintenance of an historic property, and that such lease is otherwise consistent with the department's duties and responsibilities.

For the purposes of this section the following words shall have the following meanings:-

"Historic property", any real property possessing historic value, and so identified hereunder in this section.

Any lease entered into by the department pursuant to this section shall provide, at a minimum, for the following: (a) the improvement and maintenance and management, throughout the term of the lease, of the property by the Tenant in conformance with appropriate standards for rehabilitation of historic properties approved by the Massachusetts historical commission, and all other applicable provisions of law; (b) the payment to the department of fair market rent for the property, provided that the value of any improvements and maintenance and management services provided by the Tenant under the lease may be deducted from the amount payable over the term of the lease; (c) a finding by the commissioner that the property covered by the lease, while not needed for use by the department for the duration of the lease, is nonetheless subject to its statutory duty under section one of chapter twenty-one of the General Laws to exercise control and supervision of areas of historic significance committed to it, and that the lease is entered into by the department pursuant to said duty; (d) the opening of the property to the public, no less often than twice each year, for the purpose of providing public access to the historic qualities of the property; and (e) any and all other provisions, terms and conditions as the commissioner may deem necessary and appropriate to protect the interests of the commonwealth and ensure the adequate preservation of the historic or other qualities of the property for future generations.

Historic properties subject to the provisions of this section shall include: the Barton house, so-called, Foxborough state forest, the Bell house, so-called, in Maudslay state park, the farm house, so-called, in Maudslay state park, the superintendent's house, so-called, in Wachusett Mountain state reservation, the Benjamin Osborne house, so-called, in Mount Washington state forest, Palmer mansion, so-called, in Bradley Palmer state park, E. F. Dodge house, so-called, in Bradley Palmer state park, Summit house, so-called, in Skinner state park, Hunter House, so-called, in Windsor state forest, Lowell Litchfield house, so-called, in Carlisle state forest, Graham house, so-called, in Nickerson state park, the former Knights of Columbus camp, so-called, in Dubuque state forest, Hunt house, so-called, in Mount Washington state forest, the gatekeeper's house and shed, so-called, Lowell heritage park, the superintendent's house, so-called, Beartown state forest, Swans Lodge and barn, so-called, Beartown state forest, the Intemann house, so-called, Mount Washington state forest, Crosby mansion, so-called, Nickerson state park, Graham house, so-called, Nickerson state park, Vierick house, so-called, Halibut Point state park, Elder house, so-called, Natural Bridge state park, Windago

Camp compound, so-called, Windsor state forest, and Bascom Lodge, so-called, Mount Greylock state reservation.

The commissioner shall establish guidelines for the implementation of a program of curatorship leases, provided, however, that such guidelines shall, at a minimum, provide for an open, competitive process for selecting lessees.

Historic Curatorship Enabling Legislation Amendments

Section 50, Chapter 15, Acts of 1996

SECTION 50. Said section 44 of said chapter 85 is hereby further amended by striking out, in line 35, the words ", E.F. Dodge house" and inserting in place thereof the following words:-, the Coach House and Carriage Garage at Bradley Palmer State Park, the Farm Complex at Maudslay State Park, Gilder House complex at Jug End, the Weeks House at Myles Standish State Forest, the Baker Chocolate Factory Company Administration Building at Lower Mills in the city of Boston, Lamson House and garage.

Section 19, Chapter 236, Acts of 2002

SECTION 19. Section 44 of chapter 85 of the acts of 1994, as amended by section 50 of chapter 15 of the acts of 1996, is hereby further amended by inserting after the word "forest", in line 31, the following words:- , Smith farmhouse, garage and barn in Borderland state park, Woodis house in Acushnet cedar swamp state reservation, Harlow house and barn in Ellisville state park, the farmhouse and barn in Carroll A. Holmes recreational area, formerly known as Lake Wyola state park, and coachman's house and barn in Maudslay state park.

Section 76, Chapter 182 of the Acts of 2008

SECTION 76. Section 44 of chapter 85 of the acts of 1994, as most recently amended by section 19 of chapter 236 of the acts of 2002, is hereby further amended by inserting after the words "Mount Greylock state reservation" the following words:- , Whitehead House at Willowdale state forest, Kerighan House at Bradley Palmer state park.

Section 14, Chapter 312 of the Acts of 2008

SECTION 14. Section 44 of chapter 85 of the Acts of 1994, as most recently amended by section 19 of chapter 236 of the acts of 2002, is hereby further amended by inserting after the word “reservation”, in line 45, the following words:- , CCC Camp in Upton state forest.

Section 22, Chapter 302, Acts of 2008

SECTION 22. Section 44 of chapter 85 of the acts of 1994, as most recently amended by section 76 of chapter 182 of the acts of 2008, is hereby further amended by inserting after the word “reservation”, in line 45, the following words:- , Wilbur Farmhouse and Barn at Borderland state park, police station, dormitory, laundry and waiting room structures at Nantasket Beach reservation, Caretaker’s Cottage and the Barn at Brookwood Farm in the Blue Hills reservation, 1 Woodland Road in the Middlesex Fells reservation, Print Shop at the Brook Farm Historic Site in West Roxbury, Carriage House at Havey Beach in West Roxbury, CCC Camp in Upton state forest and the Teahouse and Boathouse in Maudsley state park

Chapter 164, Acts of 2009

AN ACT RELATIVE TO THE LEASING OF THE HORSENECK POINT LIFESAVING STATION IN THE TOWN OF WESTPORT TO THE WESTPORT FISHERMEN'S ASSOCIATION.

Whereas, The deferred operation of this act would tend to defeat its purpose, which is to authorize forthwith the lease of the lifesaving station in the town of Westport to the Westport Fishermen's Association, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience.
Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Section 44 of chapter 85 of the acts of 1994 is hereby amended by striking out, in line 2, the words "environmental management" and inserting in place thereof the following words:- conservation and recreation.

SECTION 2. Said section 44 of said chapter 85 is hereby further amended by inserting after the word "forest", in line 44, the following words:- , Horseneck Point Lifesaving Station in the Horseneck Beach State Reservation.

SECTION 3. Notwithstanding sections 40F to 40J, inclusive, of chapter 7 of the General Laws or section 44 of chapter 85 of the acts of 1994 or any other general or special law or rule or regulation to the contrary, the commissioner of conservation and recreation may lease certain land and the building thereon to the Westport Fishermen's Association. The parcel, the exact boundaries of which shall be established prior to such conveyance by a survey commissioned by the commissioner, is located at the corner of West Beach and East Beach roads at Gooseberry Neck in the town of Westport and known as the Horseneck Point Lifesaving Station. The term of such lease shall be 25 years, subject to extension for another 10 year term at the discretion of the commissioner.

SECTION 4. Notwithstanding any general or special law to the contrary, the parcel described in section 3 shall be leased subject to a restriction limiting the use of the parcel to operating a lifesaving museum and promoting the appreciation of the Horseneck Point Lifesaving Station and historic resources. If at any time the property ceases to be used for the purposes described in this section or should the commissioner of conservation and recreation determine that the Westport Fishermen's Association has failed to comply with the terms of the lease entered into between the department and the Westport Fishermen's Association, the commissioner shall give written notice to the lessee of the unauthorized use. The lessee shall, upon receipt of the notice, have 30 days to respond and a reasonable time to establish an authorized use of the parcel. If an authorized use of the parcel is not thereafter established, the lease of the parcel, upon the recording of a notice thereof by the commissioner in the appropriate registry of deeds, shall terminate and any further disposition of the property shall be subject to chapter 7 of the General Laws.

SECTION 5. Notwithstanding any general or special law, or any rule or regulation to the contrary, the commissioner of capital asset management and maintenance shall, 30 days before the execution of any lease authorized by this act, or any subsequent amendment thereto, submit the proposed lease or amendment and a report thereon to the inspector general for his review and comment. The inspector general shall issue his review and comment within 15 days of receipt of the proposed lease or amendment. The commissioner of

capital asset management and maintenance shall submit the proposed lease or amendment, and the reports and the comments of the inspector general, if any, to the house and senate committees on ways and means and the joint committee on state administration and regulatory oversight at least 15 days before execution of said lease.

SECTION 6. Notwithstanding any general or special law to the contrary, the lessee shall be responsible for all costs associated with the lease of the property under this act including but not limited to, costs associated with any engineering, surveys and legal or recording fees as such costs may be determined by the commissioner of capital asset management and maintenance. During the term of the lease, the lessee shall be solely responsible for all costs, liabilities and expenses of any nature and kind for the development, maintenance and operation of the leased property.

SECTION 7. Use of the Horseneck Point Lifesaving Station shall be in compliance with all applicable statutes, regulations and executive orders, including, but not limited to, laws relating to environmental protection and the Westport Fishermen's Association shall secure all necessary approvals and permits. Failure to obtain or maintain compliance with these statutes, regulations and executive orders or to obtain and maintain permits and approvals shall constitute cause for termination of the lease and the notice and right to cure provisions of section 4 shall apply.

SECTION 8. The use of the Horseneck Point Lifesaving Station shall not interfere with the commonwealth's use and operation of adjacent property as a state park.

Chapter 67, Acts of 2011, Sections 1 and 2

SECTION 1. Section 44 of chapter 85 of the acts of 1994 is hereby amended by inserting after the words "Horseneck Beach State Reservation", inserted by section 2 of chapter 164 of the acts of 2009, the following words:- Officers' Quarters at Fort Revere in the town of Hull, Gatekeeper's House at Maudslay State Park, Gates House at Wachusett Mountain State Reservation, Blue Farmhouse and garage and associated barns 3, 4 and 5 at 215 Cold Spring road and Red Farmhouse and shed at 220 Cold Spring road at Spectacle Pond in the town of Sandisfield, the McKay House at Willowdale State Forest, 57 Dedham street in the Hyde Park section of the city of Boston, Speedway Administration Building located in the Brighton section of the city of Boston, the Police Substation on Furnace Brook Parkway in the city of Quincy, the Compressor Building at Quincy Quarries in the Blue Hills Reservation, any of the cottages on Peddock's Island in the Boston Harbor Islands National Park Area, 3 Wompatuck Cottages in Wompatuck State Park, Stress House 1 at Neponset River Reservation and, notwithstanding any general or special law to the contrary, the Schooner Ernestina and a portion of the New Bedford state pier, to provide sufficient berthing space.

SECTION 2. Said section 44 of said chapter 85 is hereby further amended by inserting after the fourth paragraph the following paragraph:-

Notwithstanding section 182B of chapter 6 of the General Laws, the department shall, as a condition of a lease of the Schooner Ernestina, require that the lessee consult with the Cape Verdean Association in New Bedford in order to provide historic and cultural education programs at said Schooner.

Section 186, Chapter 165, Acts of 2014
SECTION 83F. Section 44 of chapter 85 of the acts of 1994 is hereby amended by inserting after the words “Stress House 1 at Neponset River Reservation” inserted by section 1 of chapter 67 of the acts of 2011, the following words:- Cochituate Headhouse at Lake Cochituate in the town of Wayland.

Chapter 242, Acts of 2014
Whereas, The deferred operation of this act would tend to defeat its purpose, which is to forthwith authorize the lease of certain parkland in the city of Cambridge, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same as follows:

The fourth paragraph of section 44 of chapter 85 of the acts of 1994, as most recently amended by section 1 of chapter 67 of the acts of 2011, is hereby further amended by inserting after the words “Mount Greylock State Reservation” the following words:- Powder House, so-called, at Magazine beach in the city of Cambridge.

Section 127, Chapter 46, Acts of 2015
The fourth paragraph of section 44 of chapter 85 of the acts of 1994, as most recently amended by chapter 242 of the acts of 2014, is hereby further amended by inserting after the words “the city of Cambridge” the following words:- William H. Peterson House, so-called, at 22 Turnpike street in the Blue Hills State Reservation in the city of Canton.

Section 69, Chapter 209, Acts of 2018
The fourth paragraph of section 44 of chapter 85 of the acts of 1994 is hereby amended by inserting after the word “Canton”, as appearing in section 127 of chapter 46 of the acts of 2015, the following words:- , Randolph Avenue Stables at 1333 Randolph avenue in the Blue Hills State Reservation in the town of Milton, 7 Brainard street in the Stonybrook State Reservation in the Hyde Park section of the city of Boston.

Chapter 262 of the Acts of 2014 (former House Bill H.4359)
(not an amendment to the Section 44, Chapter 85, Acts of 1994)

An Act to preserve the historic Speedway Administration Building in the Brighton district of the city of Boston.

Whereas, The deferred operation of this act would tend to defeat its purpose, which is to promote the preservation and adaptive reuse of an important state-owned historic resource, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public, therefore, it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Notwithstanding sections 32 to 38, inclusive, of chapter 7C of the General Laws or any general or special law to the contrary, and pursuant to such additional terms and conditions as the commissioner of capital asset management and maintenance may prescribe, the division of capital asset management and maintenance, in consultation with the department of conservation and recreation, may lease a portion of a parcel of land and the so called Speedway Administration Building, and convey part of the same parcel by deed or lease the same to the Architectural Heritage Foundation, Inc., a Massachusetts non-profit corporation, or its nominee in which it maintains an interest, as the Architectural Heritage Foundation was selected through an open and public process by the department of conservation and recreation in accordance with the historic curatorship statute, being section 44 of chapter 85 of the acts of 1994, as amended by section 50 of chapter 15 of the acts of 1996, as amended by section 19 of chapter 236 of the acts of 2002, as amended by section 76 of chapter 182 of the acts of 2008, as amended by section 22 of chapter 302 of the acts of 2008, as amended by section 14 of chapter 312 of the acts of 2008, as amended by sections 1 and 2 of chapter 164 of the acts of 2009, as amended by sections 1 and 2 of chapter 67 of the acts of 2011. The parcel is presently under the care, custody and control of the department of conservation and recreation and held for conservation and recreation purposes.

SECTION 2. The parcel referenced in section 1 consists of 2 lots of lands. The first lot of land fronts Soldiers Field Road, contains approximately 8,515 square feet of land, and is shown on the city of Boston Assessors' Maps as Parcel No. 2200577001. The second lot of land contains approximately 38,155 square feet, and is a portion of the land shown on city of Boston Assessors' Maps as Parcel No. 2200577000, with said portion being bounded by Western Avenue, the above-referenced Parcel No. 2200577001, the land shown on the city of Boston Assessors' Maps as Parcel No. 2200576000, and Soldiers Field Road. Notwithstanding any general or special law to the contrary, the exact location and boundaries of the areas to be leased or conveyed, and the subdivision of the parcel and lots, shall be determined by the commissioner of capital asset management and maintenance in consultation with the department of conservation and recreation.

SECTION 3. The division of capital asset management and maintenance shall proceed in accordance with the proposal of the Architectural Heritage Foundation, Inc., as approved by the department of conservation and recreation following the open process conducted by the department under the historic curatorship statute. The proposal generally includes preservation of the historically significant portions of the Speedway Administration Building in

accordance with the Secretary of the Interior's Standards for Historic Rehabilitation, demolition of minor non-significant building additions, adaptive reuse for residential housing, non-profit organization offices, artist studio, or commercial or retail space, and the construction of a new multi-story building on the portion of the parcel authorized for conveyance by deed. Notwithstanding any general or special law or rule or regulation to the contrary, the new improvements shall be approved by the department consistent with the proposal and shall not be subject to dimensional, height and setback requirements of local zoning ordinances or zoning regulations, provided, however, that no new building shall exceed 35 feet in height for the façade of any portion of the building bordering Western Avenue, and shall not exceed 75 feet in building height as measured from Western Avenue but the Architectural Heritage Foundation, Inc. shall apply for permits from the city for the construction and occupancy of the new building, if the area is conveyed by the commonwealth, and the new building shall be otherwise subject to local zoning and other ordinances and regulations, including 5 per cent over the inclusionary development policy of the city of Boston and the Boston Redevelopment Authority for affordable units. The division and the department shall consult with the Boston Redevelopment Authority on the design review of any new buildings to be constructed on the parcel. The division may retain a conservation or preservation restriction over any area conveyed by deed, to be held by the department of conservation and recreation for the benefit of the remaining portion of the parcel. The division is authorized to grant or retain any easements as necessary to effectuate the purposes of this section. The lease of the Speedway Administration Building, once executed, shall be administered by the department of conservation and recreation as part of its historic curatorship program. Any deed, lease or other agreements shall ensure, in the discretion of the division and the department, that rents, unit or other sale proceeds, or other revenues generated from the area to be conveyed by deed are sufficiently accounted for and dedicated to ensure the continuing proper management, maintenance and capital repair of the Speedway Administration Building and its grounds throughout the term of the lease as set forth in the Architectural Heritage Foundation, Inc. proposal. During the term of the lease, the land to be conveyed by deed shall be limited to residential use or the uses identified and accepted by the department within the proposal of the Architectural Heritage Foundation, Inc. and shall not be sold, transferred or conveyed to a private college or university or its agent. The lessee under the lease, shall install and maintain a sign, on the parcel, at or near the corner of Western Avenue and Soldiers Field Road, stating "Welcome to Allston-Brighton", and provide for and maintain appropriate landscaping, subject to the approval of and design standards of the department. The lessee shall provide a minimum of 300 square feet of office space to an Allston/Brighton non-profit for a fee of 1 dollar per calendar year within the restored Speedway Building. The lessee shall contract with a bicycle sharing partner to provide rental biking opportunities on the Speedway Administration Building parcel for a period of 10 years and thereafter for the length of the lease, provide a service with a recreational purpose.

SECTION 4. In furtherance of the commonwealth's policy to ensure a no-net-loss of lands protected for natural resource purposes, the consideration for the lease and conveyance authorized in section 1 shall be the full and fair market value of the parcel, as determined by the division of capital asset management and maintenance based upon an independent professional appraisal, provided that the division shall credit the value of any improvements to the Speedway Administration Building and maintenance and management services provided by the Architectural Heritage Foundation, Inc. under the lease towards the consideration. The appraisal required by this section shall be subject to the review and approval of the inspector general, and such review shall include an examination of the methodology utilized for the appraisal. Within 30 days after receiving an appraisal, the inspector general shall prepare a report of his review and file the report with the division of capital asset management and

maintenance for submission by the division to the house and senate committees on ways and means and the joint committee on state administration and regulatory oversight. The division shall submit copies of the appraisals, and the inspector general's review and approval and comments, if any, to the house and senate committees on ways and means and the joint committee on state administration and regulatory oversight at least 15 days prior to the execution of documents effecting the transfers described in section 1. All consideration not fulfilled by the value of the improvements and maintenance and management of the Speedway Administration Building shall be deposited in the Division of State Parks and Recreation Trust Fund, established by section 34 of chapter 92 of the General Laws.

SECTION 5. Architectural Heritage Foundation, Inc. shall be responsible for all costs and expenses including, but not limited to, costs associated with any engineering, surveys, appraisals, deed preparation related to the conveyance authorized in this act as those costs may be reasonably determined by the division of capital asset management and maintenance and accepted in advance by Architectural Heritage Foundation, Inc.

Section 224 of Chapter 127 of the Acts of 1999
Crosby Mansion / Cottages Legislation
(not an amendment to the Section 44, Chapter 85, Acts of 1994)

Section 1. Notwithstanding section forty-four of chapter eighty-five of the acts of 1994, as amended by section fifty of chapter fifteen of the acts of 1996, the commissioner of the department of environmental management is authorized to convey to the town of Brewster a leasehold interest in the Crosby Mansion, so-called, and three cottages in Nickerson State Park. The area of said leasehold is described on a plan to be filed with the department of environmental management entitled "Land and buildings in Nickerson State Park to be leased to the town of Brewster." Said lease shall contain terms and conditions established by the department. Notwithstanding any other provision of law, the term of such lease shall be twenty-five years, subject to extension for another ten year term at the discretion of the commissioner.

Section 2. The use of said Crosby Mansion and cottages shall be for Town municipal purposes, and for promoting the appreciation of the Mansion and historic resources. Should said use terminate, or should the commissioner determine that the town has failed to comply with the terms of the lease entered into between said department and the town, the property described in section 1 shall revert to said department.

Section 3. Use of said mansion and cottages shall be in compliance with all statutes, regulations and executive orders governing, but not limited to environmental protection, and the town shall secure all necessary approvals and permits. Failure to obtain or maintain compliance with said statutes, regulations, or to obtain and maintain permits and approvals shall constitute cause for termination of said lease.

Section 4. The use of said Mansion and cottages shall not interfere with the Commonwealth's use and operation of adjacent property as a state park.